

made for you

# -Grundig Service

Hotline Germany... ...Mo-Fr 8.00-16.30 hr

Technical Support:

 TV/SAT
 0180/52318-41

 VCR/LiveCam
 0180/52318-42

 HiFi/Audio
 0180/52318-43

 Car Audio
 0180/52318-44

 Telecommunication
 0180/52318-45

Fax: 0180/52318-51

Spare Parts Order Desk:

Phone: 0180/52318-40 Fax: 0180/52318-50

**Kundendienst Ost**, Wittestraße 30 E , 13509 Berlin Manager: Phone (0 30) 4 38 03-20, Fax (0 30) 4 32 55 97

Kundendienst Nord, Kolumbusstr. 14, 22113 Hamburg

Manager: Phone (0 40) 7 33 31-218, -248, Fax (0 40) 7 33 31-333

Kundendienst West, Horbeller Str. 19, 50858 Köln

Manager: Phone (0 22 34) 95 81-280, -250, Fax (0 22 34) 95 81-278

Kundendienst Mitte, Dudenstr. 45 - 53, 68167 Mannheim

Manager: Phone (06 21) 33 76-210, -270, Fax (06 21) 33 76-251

Kundendienst Süd, Beuthener Str. 65, 90471 Nürnberg

Manager: Phone (09 11) 7 03-12 60, -12 69, Fax (09 11) 7 03-11 27

#### Subject to alteration!

This publication, or parts thereof, may not be reprinted without permission of the publisher.

Publisher: GRUNDIG Service GmbH

Zentralkundendienst: Technische Dokumentation

We would be obliged for any tips and suggestions or criticism which we shall give our attention. Please send to fax number: ++49 911 / 7 03 19 05

# Technical Annual 1998

Dear Readers,

In order not to go beyond the limits of a booklet this issues contains as usual only the latest data and technical changes.

For informations frequently repeated in the past few years please refer to the previous issues of the Grundig Technical Annual.

## Contents:

**General Part** 

**Electronic Appliances** 

|                       | Pall                |
|-----------------------|---------------------|
| TV Technology         | 2.1 TV              |
| Video Technology      | 3.1 Video           |
| Camcorder Technology  | 4.1 Cam-<br>corder  |
| Video Editing Systems | 5.1 Editing Systems |
| Satellite Reception   | 6.1 SAT             |
| Audio Technology      | 7.1 Audio           |

Gen.

# Partners help each other

Please help us find hidden faults and return all modules with a brief description of the fault.

For this purpose, a green fault tag or white adhesive label is enclosed with all modules (insert cards) delivered by the GRUNDIG service organisation.

| ш 2 Ш   | Fehleranhänger für Module / Label tag for modules<br>Cartellino dei diffeti per i moduli / Fiche suiveuse pour module<br>Etiqueta de avería bara módulos   |
|---|--|
| CHI VEC SILX  | Fehler tritt sofort auf / Fault aoccurs immediately / Il difetto compare subito Le défaut apparaît immédiatement / La avería aparece inmediatamente  |
| S ZZC ZZC ZZC IND   | Fehler tritt nur zeitweise auf / Fault aoccurs intermittently / Il difetto compare solo a periodi / Le défaut est intermittent / La avería aparece intermitentemente   |
| R RÜCKA<br>TURNING<br>MODULES<br>RE AL PE<br>ANDATO<br>DURRNE<br>E DEFEC<br>EVOLUC<br>OS AVER | Fehler tritt nach ca. Minuten aut Fault occurs after approx minutes Il difetto compare dopo ca. minuti Le défaut apparaî aprés environ minutes de fonctionnement La avería aparece tras minutos                |
| FÜR IHF<br>FOR RET<br>N<br>ALLEGAR<br>VIENE RIM<br>POUR RET<br>MÓDUL                          | Wackelkontakt / intermittent contact / Contatto difettoso Mauvais contact intermittent / contacto intermitente Sonstige Fehlererscheinungen: / Other faults: / Altri difetti: Autres défauts: / Otras averías: |

Sie alle Modul-Rückläufer mit vollständig ausgefüllten Fehleranhängern!
Please help us to trace obscure faults: Ensure all modules are returned with label tag completed!
Collaborate con noi nella ricera deidifetti:
corredate ogni modulo che rimandate indietro dei cartellino dei diffetti compilato in tutti i suoi punti!
Afin de nous permettre d'améliorer la Qualité de notre service, nous vous prions de nous renvoyer avec votre module, cette étiquette dûment renseignée. Merci pour votre collaboration.
Ayúdennos a encontrar las averías ocultas: procuren que cada módulo devuelto vaya con su etiqueta de avería para módulos debidamente relienda!

Bitte unterstützen Sie uns beim Auffinden versteckter Fehler: Versehen

Thank you very much for your kind assistance.

Sach-Nr.: 09624-645.03

# **Contents: General Part**

| Addresses:  |                   |
|---|-------------------|
| Grundig   | 1.2               |
| Grundig Service GmbH  | 1.2               |
| Grundig Sales Companies (Europe)  | 1.3               |
| Grundig Sales Companies (International)   | 1.5               |
| Grundig Agencies (International)  | 1.6               |
| GRUNDIG Professional Electronics GmbH Product Range and Customer Services, Test and Measuring Instrume Business Unit Test and Measuring Instruments | ents 1.10<br>1.11 |
| Service Training Courses for our Customers  | 1.15              |
| General Information on Safety, MOS, Chip and Laser Technology   | 1.16              |
| ISDN-Info Tip   | 1.24              |
| Grundig Universal Remote Controls   | 1.28              |
| Pinning of Sockets and Plugs  | 1.33              |

#### **GRUNDIG**

#### **General Management**

Kurgartenstraße 37 90762 Fürth Tel. (09 11) 7 03-0

Tel. (09 11) / 05-0

Telefax: (09 11) 70 53 76

Btx: \*32700#

## **Grundig Service GmbH**

#### Zentralkundendienst

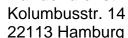
Beuthener Str. 55 90471 Nürnberg Tel. (09 11) 7 03-0

Telefax: (09 11) 7 03-19 03

#### **Kundendienst Ost**

Wittestraße 30 E 13509 Berlin Telefon (0 30) 4 38 03-20 Telefax (0 30) 4 32 55 97

#### **Kundendienst Nord**



Telefon (0 40) 7 33 31-218/-248

Telefax (0 40) 7 33 31-333

#### **Kundendienst West**

Horbeller Str. 19 50858 Köln Telefon (0 22 34) 95 81-2 80 Telefax (0 22 34) 95 81-2 78

#### **Kundendienst Mitte**

Dudenstr. 45 - 53 68167 Mannheim Telefon (06 21) 33 76-210 Telefax (06 21) 33 76-251

#### Kundendienst Süd

Beuthener Str. 65 90471 Nürnberg Telefon (09 11) 7 03-12 60 Telefax (09 11) 7 03-11 27

Gen. Part

#### Gen. Part

## **Grundig Sales Companies (Europa)**

S.A. Grundig Belux N. V.

Deltapark Unit 3, Weihoek 3 G, B-1930 Zaventem

Phone: (00 32-2) 7 16 04 00, Fax: (00 32-2) 7 16 03 80

Grundig Danmark A/S

Lejrvej 19, DK-3500 Vaerløse

Phone: (00 45) 44 48 68 22, Fax: (00 45) 44 48 62 63

**Grundig Oy** 

Luoteisrinne 5, SF-02271 Espoo, Finland

Phone: (0 03 58) 98 04 39 00, Fax: (0 03 58) 98 04 39 01

Grundig France S. A.

5, Boulevard Marcel Pourtout, F-92563 Rueil Malmaison Cedex

Phone: (00 33-1) 41 39 26 26, Telex: 0 42-63 45 04, Fax: (00 33-1) 47 08 69 48

Grundig UK Limited.

Elstree Way, Borehamwood, Herts, WD6 1RX, Great Britain

Phone: (00 44-181) 324 94 00, Fax: (00 44-181) 324 94 0131.10.1997

Grundig Italiana S. P. A.

Via G. B. Trener 8, I-38100 Trento

Phone: (00 39-4 61) 89 31 11, Fax: (00 39-4 61) 89 34 08

Grundig Nederland B. V.

Joan Muyskenweg 22, NL-1096 CJ Amsterdam

Phone: (00 31-20) 5 68 15 68, Fax: (00 31-20) 5 68 14 06

Grundig Norge AS

Glynitveien 25, Postboks 234, N-1401 Ski

Phone: (00 47) 64 87 82 00, Fax: (00 47) 64 87 66 10

Grundig Austria Ges. m. b. H.

Breitenfurter Str. 43-45, A-1120 Wien

Phone: (00 43-1) 81 11 73 06, Telex 0 47-13 39 03, Fax: (00 43-1) 81 11 77 13

Grundig Portuguesa, Comércio de Artigos Electronicos Lda.

Rua Bento de Jesus Caraça, 17, P-1495 Cruz Quebrada

Phone: (0 03 51-1) 4 19 75 70, Fax: (0 03 51-1) 4 19 90 83

Grundig Svenska AB

Box 4050, Albygatan 109 D, S-171 04 Solna

Phone: (00 46-8) 6 29 85 30, Telex: 0 54-1 99 34, Fax: (00 46-8) 6 29 85 70

Grundig (Schweiz) AG

Steinackerstr. 28, CH-8302 Kloten

Phone: (00 41-1) 8 15 81 11, Fax: (00 41-1) 8 13 52 31

#### Grundig Espana S. A.

Solsonés, 2, Edif. Muntadas (Mas Blau I), E-08820 El Prat de Llobregat (Barcelona)

Phone: (00 34-3) 4 79 92 00, Fax: (00 34-3) 4 79 92 47

#### Grundig Ireland Ltd.

2 Waverley Office Park, Old Naas Road, Dublin 12/Eire

Phone: (0 03 53-1) 4 50 97 17, Fax: (0 03 53-1) 4 50 99 36

#### Grundig Polska SP. Z.O.O. (After-Sales Service)

Ul. Czéstochowska 140, PL - 62-800 Kalisz, Poland

Phone: (00 48-62) 7 66 77 70, Fax: (00 48-62) 7 66 77 72

#### Grundig Polska SP. Z.O.O.

Ul. Raclawicka 146, PL - 02-117 Warszawa, Poland

Phone: (00 48-22) 6 68 62 66, Fax: (00 48-22) 6 68 62 54

#### Grundig spol. s r.o.

Koperniková 2, CZ - 12 000 Praha 2, Czechia

Phone: (0 04 20) 2 - 24 23 90 99, (0 04 20) 2 - 24 23 90 81, Fax: (0 04 20) 2 - 24 23 51 01

#### Grundig Slovensko spol. s r.o.

Mileticova 23, SK - 820 06 Bratislava, Slovakia

Phone: (0 04 21) 7 - 52 67 219, (0 04 21) 7 - 54 44 377, Fax: (0 04 21) 7 - 54 25 677

#### Grundig Magyarország Kft.

Bécsi út 85, H - 1036 Budapest, Hungary

Phone: (00 36) 1 - 25 08 142, (00 36) 1 - 25 08 143, Fax: (00 36) 1 - 25 08 144

#### Grundig Slovenija d.o.o.

Part

Dunajska 22, SL - 1511 Ljubljana, Slovenia

Phone: (0 03 86) 61 - 32 88 79, (0 03 86) 61 - 32 88 83, Fax: (0 03 86) 61 - 32 86 86

#### Grundig Predstavnistvo za Hvratsku

Metalceva 5, HR - 10000 Zagreb, Croatia

Phone and Fax: (0 03 85) 1 - 39 17 78, (0 03 85) 1 - 39 34 06

1.4

## **Grundig Sales Companies (International)**

Grundig Electronics India Pvt. Ltd.

No. 37, Sterling Road

Nungambakkam

Madras - 600 034

India

Phone: (00 91-44) 8 23 38 82, Fax: (00 91-44) 8 23 38 81

Grundig International Russia

UL. Obrazszova 17 103055 Moscow

Russia

Phone: (0 07-0 95) 9 73 30 54, Fax: (0 07-0 95) 9 73 30 57

Grundig International Russia

Izmeilovsky Prospekt 9/2

198005 St. Petersburg

Russia

Phone: (0 07-8 12) 2 51 43 81, Fax: (0 07-8 12) 2 59 93 22

Grundig Gulf F.Z.E.

P.O. Box 61012

Jebel Ali / Dubai

**United Arab Emirates** 

Phone: (00 97-14) 83 89 89, Fax (00 97-14) 83 87 98

Gen. Part

# **Grundig Agencies (International)**

|                     | ·   |                |  |
|---------------------|---|----------------|--|
| Australia           | SCE-Southern Cross Electronics Pty. Ltd. 26-30 Kent Street Bekmore NSW 2192 Sydney Australia        | Phone:<br>Fax: | 00 61-2-7 50 31 66<br>00 61-2-7 59 66 21   |
| Algeria             | E.I.P.EL  14, Rue Khaled Bellagaune (ex Lulli)  Alger 16000   |                | 0 02 13-2-63 66 94<br>0 02 13-2-61 00 97   |
| Argentina           | Crown Mustang S.A. Av. Eva Perón 7455/85 1439 Buenos Aires Argentina                                | Phone:<br>Fax: | 00 54-1-686-10 71<br>00 54-1-686-45 51     |
| Bulgaria            | Euro TV SAT<br>Bul. Bukston BL 15/D/11<br>1618 Sofia<br>Bulgaria                                    | Phone:<br>Fax: | 0 03 59-2-80 86 06<br>0 03 59-2-80 87 89   |
| Cyprus              | Ideal Grafico Ltd. 14C Stassinos Ave. P.O. Box 4809 Nicosia Cyprus                                  | Phone:<br>Fax: | 00 35-72-44 10 75<br>00 35-72-45 51 59     |
| Egypt               | International Electrical Products 1, EL Obour Bldg. Salah Salem P.O. Box 217 Heliopolis Cairo Egypt | Phone:<br>Fax: | 0 02 02-2 61 83 33<br>0 02 02-2 61 99 13   |
| Greece              | Elex S.A.  13th km National Road  14564 Kifissia  Athens  Greece                                    | Phone:<br>Fax: |  |
| Hong Kong/<br>China | Great Wall Electronics Ltd.<br>16/F., Riley House<br>88 Lei Muk Road<br>Kwai Chung<br>Hongkong      | Phone:<br>Fax: | 0 08 52-24 10 86 68<br>0 08 52-24 21 12 87 |
| Iceland             | Television Center Ltd. Sidumula 2 128 Reykjavik Iceland   | Phone:<br>Fax: | 0 03 54-5-68 90 90<br>0 03 54-5-68 03 90   |
| Iran                | Pars Electric MFG Co.<br>563 Azadi Ave.<br>Theran<br>Iran   | Phone:<br>Fax: | 00 98-21-6 02 51 00<br>00 98-21-6 02 50 95 |

1.6

Gen. Part

| Gen  |
|------|
| Part |

| Iran         | Pars Services Co.<br>9 km Karadj Road<br>P.O. Box 13445/146<br>Theran   | Phone:<br>Fax: | 00 98-21-6 02 56 07<br>00 98-21-6 02 56 01   |
|--------------|---|----------------|--|
| Israel       | Iran<br>Pira Ltd.<br>19, Hatzfira Street<br>P.O. Box 28085<br>Tel Aviv  | Phone:<br>Fax: | 0 09 72-3-6 87 62 30<br>0 09 72-3-5 37 47 07 |
| Malaysia     | Israel Luxor Electric Corp. Sdn. Bhd. Wisma Luxor, No. 5 II. Beratu 12/4 46200 Petaling Jaya Malaysia                                 | Phone:<br>Fax: | 0 06 03-7 50-29 99<br>0 06 03-7 56-59 00     |
| Malta        | Jokate Group of Co.Ltd. Jokate Buildings P.O. Box 1 Msida, Malta  | Phone:<br>Fax: | 0 03 56-22 10 12<br>0 03 56-24 31 54         |
| Morocco      | Umareq 43, Bld. Ibn. Tachfine Casablanca Morocco  | Phone:<br>Fax: | 0 02 12-2-30 15 42<br>0 02 12-2-30 30 03     |
| New Zealand  | Sound group Holding Ltd. Unit B/3 Rothwell Ave. Albany P.O. Box 33-791 Takapuna, Auckland New Zealand                                 | Phone:<br>Fax: | 00 64-9-4 15-66 80<br>00 64-9-4 15-66 83     |
| Romania      | SSH Marketing GmbH Buchenstraße 15 D-63526 Erlensee Germany   | Phone:<br>Fax: |  |
| South Africa | for car audio products:  SSM  Unit 4 Stand 6, Fedlife Park  Tonetti Street  Midrand  South Africa  for consumer electronics products: | Phone:<br>Fax: | 00 27-11-3 15 33 15<br>00 27-11-8 05-36 27   |
|              | Specialised Communications (Pty) Ltd. P.O. Box 41602 Craighall 2024 33th Avenue, Orchards Johannesburg 2192 South Africa              | Phone:<br>Fax: | 00 27-11-7 28 10 53<br>00 27-11-7 28 15 25   |
| South Korea  | Lee & Lee International Co. Ltd.<br>Rm 1325 Life Officetel<br>Yoido Dong 61-3<br>Youngdeungpo-Ku<br>Seoul<br>Republic of Korea        | Phone:<br>Fax: | 00 82-2-7 83 42 25<br>00 82-2-7 86 13 29     |

| Taiwan        | Tatung CoAV-plant<br>22, Chungshan North Road,<br>3rd Sec.<br>Taipai  | Phone:<br>Fax: | 00 88 62-5 94-26 91<br>00 88 62-5 94-26 60   |
|---------------|---|----------------|--|
| Taiwan        | Taiwan, 104 R.O.C. GRE Trading P.O. Box 26-1182 11F. No. 602, Tun Hua South Taipai                              | Phone:<br>Fax: | 0 08 86-2-7 55-43 85<br>0 08 86-2-7 55-23 93 |
| Tunisia       | Taiwan, R.O.C. Telectronic S.A. Zone Industrielle den Ben Arous B.P. 294 Ben Aurous 2013                        | Phone:<br>Fax: | 0 02 16-1-38 01 55<br>0 02 16-1-38 51 25     |
| Turkey        | Tunis Tunesia Mercansoy Yildirim Mah. Ali Fuat Basgil Cad. 43 Bayrampasa 34170                                  | Phone:<br>Fax: | 00 90-212-649-32 96<br>00 90-212-537-56 98   |
| U.S.A. Reexp. | Istanbul Turkey Manhattan Electric Industries 140, 58th Street Brooklyn Army Terminal Unit 4-G, Box No. 38      | Phone:<br>Fax: | 0 01-7 18-5 67 05 00<br>0 01-7 18-5 67 06 30 |
| U.S.A.        | Brooklyn, NY 11220<br>U.S.A.<br>Lextronix Inc.<br>3520 Haven Avenue, Unit L<br>Redwood City, CA 94063<br>U.S.A. | Phone:<br>Fax: | 0 01-4 15-3 61 16 11<br>0 01-4 15-3 61 17 24 |
| Export        | EKG Export Kontor<br>Michaelistraße 4<br>D-20418 Hamburg  | Phone:<br>Fax: | 00 49-40-36 30 55<br>00 49-40-36 39 90       |

1.8

Germany

# Partners help each other

Please help us find hidden faults and return all car radios with a brief description of the fault.

For this purpose, this adhesive label is enclosed with all car radios delivered by the GRUNDIG service organisation.

| GRUNDIG<br>Service                               |   |                                       | E - Dokument   Fehlerhinweise für Fault Report for Co |   |  |   |
|--|---|---------------------------------------|---|---|--|---|
| Kauf-/Tausch<br>Purchase/Re                      | placement D                                   | ata                                   |   | Rundfunkteil/   |  | Cassettenteil<br>Cassette Stage   |
| Gerätenummer/  Nur bei Geräten  Händlerstempel/G | ohne Rahmenn<br>Dealer Stamp<br>Company Stamp |                                       | Code  | □ UKW gestört     □ LMK gestört     □ keine Funktion     □ Speicherfehler     □ Stereofehler     □ Tonfehler     □ Verkehrsfunk     □ SCV-Regelung     □ VIP-Betrieb     □ RDS Funktionen |  | □ Cassette läuft nicht No Cassette drive □ Cassettenlauf Cassette Drive □ Cassettenauswurf Cassette Eject □ Reverse Betrieb Reverse Mode □ Wiedergabe-Fehler Playback Fault □ Kanalausfall Loss of Channel □ Laufgeräusche Mechanical Noise □ Sonstige Fehler |
| Unterse<br>Signa<br>Austauschtaa                 |   | Verkaufsd<br>Date of S<br>Tausch durc | iale  | Wann tritt der<br>When does the   |  | Other of Faults   |
| Date of Repla                                    | cement  | Replaced by                           | y   | ☐ Immer ☐ Nur zeitweise ☐ Nur bei Kälte   | Immediatly Intermittent Only when Cold |   |
| Datum/Date                                       |   | (WKZ/NL)                              |   | Nur bei Wärme   | ,                                      |   |

Thank you very much for your kind assistance.



# GRUNDIG

# **Product Range and Customer Services Test and Measuring Instruments**

MO 30 - 30MHz Dual Channel Oscilloscope Oscilloscopes

MO 32 - 30MHz Dual Channel Oscilloscope

**Laboratory and Service Measuring Instruments** 

RLC 300, RLC 200 and RLC 100 - Automatic Programmable R-L-C Meter

PN 300 and PN 200 - Programmable Power Supply

UZ 2500 - Universal Counter (2.4GHz) with A-, B- and C-channel UZ 2400 - Universal Counter (2.4GHz) with A- and C-channel

RF 1000 - RF Millivoltmeter MV 100 - RF Millivoltmeter DM 100 - Digital Multimeter TG 100 - Sine Wave Generator FG 100 - Function Generator

Video Measuring

FG 9 S/PLL - Colour Generator

Instruments

FG 70 S/PLL/VPS/NICAM - Colour Generator VG 1100 PAL/NTSC - Video Generator

VTG 700 sat - Video Transmission Generator

**PALplus Equipment** PPE400 - Professional PALplus Studio Encoder

> PPE600 - Professional PALplus Studio Decoder VTG 700 PALplus - Video Transmission Generator

**Antenna Measuring** 

ME 400 (Printer) - Antenna Measuring Receiver ME 900 - Antenna Measuring Receiver Instruments

ME 100 - Combination Measuring Receiver ME 700 SAT - Combination Measuring Receiver

ME 900 SAT - Combination Measuring Receiver ME 900 color - Combination Measuring Receiver SM 200 (Polarizer) - Satellite Measuring Receiver

**Accessories** Connecting cables, probes and adapters,

oscilloscope accessories

For deliverability and advertising literature please contact:

**Grundig Instruments** Test- und Meßsysteme GmbH Würzburger Str. 150, D-90766 Fürth Phone: 0911 / 703-4118

Fax: 0911 / 703-4130

Gen. Part

1.10

|  | nstruments (Germany)           |         |                    |
|--|--------------------------------|---------|--------------------|
| Area Manager North                     | H. Siebrasse                   | Phone   | 0 50 66/20 31      |
|  | Hagenkamp 15                   | Fax     | 0 50 66/20 32      |
|  | D-30982 Pattensen              |         |                    |
| Area Manager West                      | K. Vogel                       | Phone   | 0 21 91/94 86-70   |
| G                                      | Walter-Freitag-Str. 19         | Fax     | 0 21 91/94 86-69   |
|  | D-42899 Remscheid              |         |                    |
| Area Manager Centre                    | KH. Kaiser                     | Phone   | 0 61 01/4 89 43    |
| · ···································· | Am Klingelborn 29              | Fax     | 0 61 01/4 88 36    |
|  | D-60437 Frankfurt              |         | 0 0 1 0 1/ 1 00 00 |
| Area Manager South                     | W. Meinicke                    | Phone   | 0 91 26/28 80 83   |
| 7 (Tea Manager Court                   | Behringstraße 46               | Fax     | 0 91 26/28 80 96   |
|  | D-90542 Eckental               | ı ax    | 0 31 20/20 00 30   |
| Sales Area Northeast                   | DiplIng. Andre Schrank         | Phone   | 030/9 82 42 42     |
| Sales Alea Nottheast                   | Straße 142, Nr. 33             | Fax     | 030/9 82 42 41     |
|  | D-13053 Berlin                 | гах     | 030/9 62 42 41     |
| Cänal alastrania Cmbl.                 |                                | Dhana   | 0.26.44/60.06.66   |
| Göpel electronic GmbH                  | Göschwitzer Straße 58/60       | Phone   | 0 36 41/68 96-66   |
|  | D-07745 Jena                   | Fax     | 0 36 41/68 96-44   |
| Test and Measuring I                   | Instruments (International)    |         |                    |
| Australia                              | Rohde & Schwarz Pty. Ltd.      | Phone   | +61-2-97 48 01 55  |
|  | 63 Parramatta Road             | Fax     | +61-2-97 48 18 36  |
|  | Silverwater N.S.W. 21 41       |         |                    |
| Austria                                | GRUNDIG Austria Ges.m.b.H.     | Phone   | +43-1-8 11 17-0    |
| , idotria                              | Breitenfurter Straße 45-47     | Fax     | +43-1-8 11 17-599  |
|  | A-1120 Wien                    | I UX    | 140 1 0 11 17 000  |
| Belgium                                | GRUNDIG Belux N.V./S.A.        | Phone   | +32-27 16 04 00    |
| Deigidiff                              | Deltapark, Weihoek 3 - Unit 3  | Fax     | +32-27 16 03 80    |
|  | 1930 Zaventem                  | ιαλ     | +32-21 10 03 00    |
| Denmark                                |                                | Phone   | +45-75 56 70 00    |
| Denmark                                | Erik Blichfeld A/S             |         |                    |
|  | Essen 27                       | Fax     | +45-75 56 70 07    |
| Danasada                               | DK-6000 Kolding                | Disassa | . 45 00 70 00 00   |
| Denmark                                | Witronic A/S                   | Phone   | +45-36 72 20 00    |
|  | Roskildevej 308                | Fax     | +45-36 72 04 40    |
|  | DK-2610 Rødovre                | -       | 4-000040           |
| Denmark                                | Philips TV Test Equipment AS   | Phone   | +45-32-88 57 13    |
|  | Kornmarksvey 21                | Fax     | +45-43 43 23 90    |
| _                                      | 2605 Brøndby                   |         |                    |
| Egypt                                  | Philips Egypt                  | Phone   | +20-2-3 49 09 22   |
|  | 10, Abdel Rahman El Rafei St.  | Fax     | +20-2-3 49 21 42   |
|  | Mohandessin                    |         |                    |
|  | P.O.Box 242 Dokki              |         |                    |
|  | Cairo                          |         |                    |
| Finland                                | Perel Oy                       | Phone   | +358-19-8 71 11    |
|  | Torpankatu 28                  | Fax     | +358-19-8 71 15 00 |
|  | SF-05800 Hyvinkää              |         |                    |
| France                                 | Salies S.A.                    | Phone   | +33-1-69 20 40 10  |
|  | 65-67, Avenue Jean Jaurès      | Fax     | +33-1-69 20 36 04  |
|  | F-91122 Palaiseau              |         |                    |
| Greece                                 | Berger Electronics             | Phone   | +30-341-7 21 72    |
|  | Industrial Area                | Fax     | +30-341-7 21 72    |
|  | 61100 Kilhis                   |         |                    |
| Hong Kong                              | Schmidt & Co. (HK) Ltd.        | Phone   | +852-5-8 33 02 22  |
|  | 18th Floor, Great Eagle Centre | Fax     | +852-5-8 27 56 56  |
|  | 23, Harbour Road               |         | . 552 5 5 21 66 66 |
|  | Wanchai                        |         |                    |
|  | · · ai loi lai                 |         |                    |

| Hong Kong    | GEC Hong Kong<br>CCWu Building<br>302-308 Hennessy Road,<br>Wanchai  | Phone<br>Fax | +852-29 19 82 82<br>+852-28 34 57 73      |
|--------------|--|--------------|---|
| India        | P.O.Box 15 GPO<br>Photophone Ltd.<br>Comel Division 179/5,   | Phone<br>Fax | +91-22-5 78 36 60<br>+91-22-5 78 43 25    |
| Indonesia    | II Cross Road Palace Lower Orchards Bangalore - 560003   | Dhana        | .00.24 5.05 50.40                         |
| Indonesia    | GAE PT Guna Elektro<br>Jl. Terusan Arjuna 50<br>RI-Jakarta Barat 11510   | Phone<br>Fax | +62-21-5 65 50 10<br>+62-21-5 65 50 30    |
| Israel       | Kanion<br>8 Mikhaelis St.<br>Kiryat-Arie<br>P.O.Box 3783 Petah-Tikva   | Phone<br>Fax | +972-3-9 21 27 40<br>+972-3-8 22 07 51    |
| Italy        | GRUNDIG Italiana S.p.A.<br>Via Brennero 364<br>I-38100 Trento  | Phone<br>Fax | +39-461-82 20 55<br>+39-461-89 32 07      |
| Japan        | Matsushita Electric Industrial Ltd. Corporate International Trade Division (CID) Tokyo Office Trade Center, P.O. Box 18 Tokyo, 105 | Phone<br>Fax | +81-3-54 04 88 43<br>+81-3-54 04 88 49    |
| Japan        | Matsushita Electric Industrial Co. Ltd. (MEI) Corporate International 1-30 Shibadaimon 1-chome Minato-Ku Tokyo, 105                | Phone<br>Fax | +81-3-35 78 94 35<br>+81-3-34 59 66 14    |
| South Korea  | Seo Han Industries Co.<br>RM 803 Millionaire Bldg. 99-1<br>Garak-Dong, Songpa-Ku<br>Seoul<br>Korea                                 | Phone<br>Fax | +82- 2- 40 63 89 14<br>+82- 2- 40 63 89 5 |
| Netherlands  | Koning en Hartman<br>Energieweg 1<br>P.O.Box 125<br>NL-2600 Delft  | Phone<br>Fax | +31-15-2 60 99 06<br>+31-15-2 61 91 94    |
| Norway       | GRUNDIG Norge A/S<br>Postboks 234<br>N-1401 Ski  | Phone<br>Fax | +47-64-87 82 00<br>+47-64-87 66 10        |
| Portugal     | GRUNDIG Portuguesa<br>Rua Bento de Jesus<br>Caraca 17, Cruz Quebrada<br>1495 Lisboa  | Phone<br>Fax | +351- 141- 9 75 70<br>+351- 141- 9 90 83  |
| Singapore    | Gold Lite Pte. Ltd. Attn. Mr. Lau Henderson Industrial Park #08-03 Singapore 159552  | Phone<br>Fax | +65-2 73 04 87<br>+65-2 73 50 06          |
| South Africa | S.A. Philips (Pty) Ltd.<br>192-195 Main Road<br>Martindale 2092<br>Republic of South Africa  | Phone<br>Fax | +27-11-4 70 52 05<br>+27-11-4 70 52 06    |

1.12

Gen. Part

| _              |                                    |       |                      |
|----------------|------------------------------------|-------|----------------------|
| Sweden         | Ferner Electronics AB              | Phone | +46-8-7 60 83 60     |
|                | Veddestavägen 15                   | Fax   | +46-8-7 60 83 41     |
|                | S-17526 Järfälla                   |       |                      |
| Sweden         | Polystar AB                        | Phone | +46-8-7 11 57 39     |
|                | Dalhemsvägen 23                    | Fax   | +46-8-7 11 44 45     |
|                | S-14146 Huddinge                   |       |                      |
| Switzerland    | GRUNDIG Schweiz AG                 | Phone | +41-1-8 15 81 11     |
|                | Steinackerstraße 28                | Fax   | +41-1-8 13 52 31     |
|                | CH-8302 Kloten                     |       |                      |
| Switzerland    | Erivision AG                       | Phone | +41-62-3 91 11 34    |
|                | Im Moos 13                         | Fax   | +41-62-3 91 48 19    |
|                | CH-4710 Balsthal                   |       |                      |
| Taiwan         | Precision International Corp.      | Phone | +886-2-9 99 08 50    |
|                | P.O. Box 03-15                     | Fax   | +886-2-9 99 15 22    |
|                | Sanchung City                      |       |                      |
|                | 241 Taipei                         |       |                      |
| Thailand       | Schmidt Scientific (Thailand) Ltd. | Phone | +662-2 36 77 84 86   |
|                | 69/5 Soi Sueksavittaya             | Fax   | +662-2 37 26 27      |
|                | North Sathorn Road                 |       |                      |
|                | Bangkok 10500                      |       |                      |
| Czech Republic | Utes Brno                          | Phone | +420- 5- 41 12 28 35 |
| 0200111000000  | Purkynova 99 E                     | Fax   | +420- 5- 41 21 22 51 |
|                | 61245 Brno                         | · an  |                      |
| UK             | GRUNDIG International Ltd.         | Phone | +44-17 88-54 58 21   |
|                | Mill Road                          | Fax   | +44-17 88-54 58 88   |
|                |                                    |       | 177 17 00 07 00 00   |
|                | GB-Rugby, Wanwickshire CV21 1F     | T     |                      |

# **Subgroup Automotive Test and Measuring Instruments**

| Brazil      | Nahuel Industrial Comercial Ltda<br>Rua Pedro Alexandrino 205<br>CEP 09901<br>Jordim Portinari, Diadema<br>Sao Paulo | Phone<br>Fax | +55-11-7 46 71 33<br>+55-11-7 46 71 81 |
|-------------|--|--------------|--|
| Norway      | a.s. Fartskriver<br>Persveien 32<br>P.B. 78, Oekern  | Phone<br>Fax | +47-22-64 58 60<br>+47-22-65 83 50     |
| Portugal    | 0508 Oslo<br>Gruber Lda<br>Rua Oliveira Martins, 10-5°D  | Phone<br>Fax | +351-1-2 74 76 79<br>+351-1-2 59 23 47 |
| Spain       | 2810 Feijó<br>EDAGYAM S.L.<br>C/Rosalia de Castro, 40 bajo<br>15895 Milladoiro                                       | Phone<br>Fax | +34-81-52 40 75<br>+34-81-52 40 75     |
| Switzerland | (Santiago de Compostela)<br>W. Luginbühl AG<br>Bruneggerstraße 45<br>CH-5103 Möriken                                 | Phone<br>Fax | +41-62-8 93 24 24<br>+41-62-8 93 37 05 |

# Partners help each other

Please help us find hidden faults and return all modules with a brief description of the fault.

For this purpose, a green fault tag or white adhesive label is enclosed with all modules (insert cards) delivered by the GRUNDIG service organisation.

| , <sub>ш</sub> ஜ <u> </u>  | Fehleranhänger für Module / Label tag for modules<br>Cartellino dei diffeti per i moduli / Fiche suiveuse pour module<br>Etiqueta de avería bara módulos  |
|--|---|
| FÜR IHR RÜCKABETEIL<br>FOR RETURNING FAULTY<br>MODULES<br>ALLEGARE AL PEZZO CHE<br>VIENE RIMANDATO INDIETRO<br>POUR RETOURRNER AVEC LE<br>MODULE DEFECTUEUX<br>PARA DEVOLUCIÓN DE<br>MÓDULOS AVERIADOS | Fehler tritt sofort auf / Fault aoccurs immediately / Il difetto compare subito Le défaut apparaît immédiatement / La avería aparece immediatamente  Fehler tritt nur zeitweise auf / Fault aoccurs intermittently / Il difetto compare solo a periodi / Le défaut est intermittent / La avería aparece intermitentemente  Fehler tritt nach ca. Minuten aut minutes Il difetto compare dopo ca. minutes Il difetto compare dopo ca. minuti Le défaut apparaî aprés environ minutes de fonctionnement La avería aparece tras minutos  Wackelkontakt / intermittent contact / Contatto difettoso |
|  | Mauvais contact intermittent / contacto intermitente Sonstige Fehlererscheinungen: / Other faults: / Altri difetti: Autres défauts: / Otras averías:  |

Bitte unterstützen Sie uns beim Auffinden versteckter Fehler: Versehen Sie alle Modul-Rückläufer mit vollständig ausgefüllten Fehleranhängern! Please help us to trace obscure faults: Ensure all modules are returned with label tag completed!

Collaborate con noi nella ricera deidifetti: corredate ogni modulo che rimandate indietro dei cartellino dei diffetti compilato in tutti i suoi punti!

Afin de nous permettre d'améliorer la Qualité de notre service, nous vous prions de nous renvoyer avec votre module, cette étiquette dûment renseignée. Merci pour votre collaboration.

Ayúdennos a encontrar las averías ocultas: procuren que cada módulo devuelto vaya con su etiqueta de avería para módulos debidamente relienda!

Thank you very much for your kind assistance.

Gen. Part

1.14 Grundig Service

#### Gen. Part

## SERVICE TRAINING COURSES for our Customers

We train you in intensive courses in the GRUNDIG after-sales service division in Nürnberg as well as in one-day regional training courses.

We deal with all current questions on product technology in the fields of television, satellite reception, video, digital audio, and communications.

For detailed information on these courses please see the technical training booklet which is available on request from your competent GRUNDIG contact partner.

## **Training with Training Film Cassettes**

GRUNDIG offers a training film titled "Servicing made easy - Training by Video" designed for private study and practical application in the field of servicing which has proven very well. The present offer of video cassettes comprises:

#### Training Film: Video VHS (2 x 4/1600)

Flow converter power supply • sequence and motor control • servo control/ATF • video signal path • chroma signal path • mechanical adjustments • length ca. 90 minutes.

#### Training Film: Video VHS (VS 200/220)

Diagnosis • power supply • sequence and motor control • servo control • video and chroma signal path • mechanical adjustments • length ca. 110 minutes.

#### Training Film: Television Compact Universal Chassis

Switched mode power supply• transistor line output stages 90/110 degrees • east/west modulator • multistandard reception • viewdata retrofitting • length ca. 55 minutes.

Training Film: Video VHS (VS 310, 320, 380 HiFi)

Part No.:72007-744.90 (in English) 72007-744.91 (in Italian) 72007-744.92

Part No.:72007-744.95

Part No.:72007-744.60

Part No.:72007-744.70

Part No.:72007-744.80

Diagnosis • service works on drive mechanism• adjustments and mechanical settings • repair hints • functional characteristics of electrical modules • length ca.110 minutes.

#### **Training Film: The Horizontal TV Chassis**

Line power supply • multi-standard reception • transistor line output stages 90/110 dregrees • viewdata and PC connecting instructions • satellite receiver • satellite reception • adjustment of the paraboloidal reflector • service hints • length ca. 60 minutes.

#### Training Film: Video VHS (VS 340/400)

Circuitry and mechanics • length ca. 90 minutes.

#### Training Film: Video VS 540 HiFi

Circuitry and mechanics • length ca. 80 minutes.

#### Training Film: STP 300 Satellite System

Installation of the satellite system STP 300 • length ca. 30 minutes.

# Training Film: Highspeed Video Drive Mechanism HSD

Dismantling and re-assembling the drive mechanism • replacement of wearing parts • replacement of the headwheel and the CTL head • adjustment of the tape run, tracking position and head gap position indicator • length ca. 30 minutes.

Grundig Service 1.15

Part No.:72007-744.98

Part No.:72007-744.97

Part No.:72007-744.61

Part No.:72007-744.81

## (GB)

## General Instructions for Safety, MOS, Chip and Laser Technology







This Service Manual covers the safety regulations which must be observed when carrying out repairs.

It is to be regarded as a supplement to all Service Manuals which will be issued in future without these safety regulations.

Preserve this Service Manual carefully and observe the instructions given in it for product liability.

Please observe also all additional national safety regulations!

#### **Contents**

Gen. Part

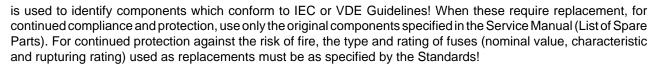
|   | Page |
|---|------|
| Safety Instructions   | 1.17 |
| Safety Standard Compliance                                    | 1.17 |
| Electrical Safety after Repairs                               | 1.18 |
| Important Advice and Safety Tests relevant to Service Repairs | 1.19 |
| Important Safety Instructions                                 | 1.19 |
| Laser Safety  | 1.21 |
| Safety Advice for Lithium Batteries                           | 1.22 |
| Handling of MOS Chip Components                               |      |
| MOS Soldering Instructions                                    | 1.22 |
| CHIP Technology   | 1.23 |

#### Gen. Part

## **Safety Instructions**

The products identified in Service Manuals were manufactured to meet strict Quality and Safety Standards. It is imperative that the Safety Standards are observed when carrying out repairs to ensure that the product always conforms to IEC 65 or VDE Regulations and the harmonised National Safety Regulations, eg. Low Voltage Directive (73/23/EEC), the Low Voltage Electrical Equipment (Safety) Regulations, 1989 (UK) and the Electricity at Work Regulations, 1989 (UK) before it is returned to the owner.

This symbol: /



After any repair, it is imperative that the <u>Leakage Current</u> and/or <u>Insulation Resistance</u> is checked as described in this Safety Manual. If the result of the check indicates that the product does not conform, the user / owner must be notified in writing. If the user / owner requests that the product is to be returned in a defective condition, the written warning must draw notice to the risks. In all cases:

- The mains plug and the fuse fitted (UK) must be checked and any defect found corrected.
- The mains lead, and any other connecting leads, must be checked for damage and defects rectified. Check the insulation!
- The functional reliability of all tension relief and bending protection bushes provided in the product must be checked and defects rectified.
- For continued safety compliance, safety determining parts in the product must not be damaged or evidently unsuitable. This is especially valid for insulators and insulating parts.
- Use specified parts only. For components and assemblies marked with the Safety Symbol 
   <sup>↑</sup> the original specified spare parts only are strictly to be used.
- Use, if applicable, only information published in Grundig Technical Bulletins or in the Grundig Infotip System.
- Thermally loaded solder pads and those passing large currents, known by experience to cause a risk, must be thoroughly cleaned and re-soldered.
- Ensure that the ventilation openings are not obstructed or contaminated with dust.
- Ensure the proper disposal of exhausted batteries and accumulators (hazardous waste environmental protection!)
- For all receivers, ensure that the aerial system conforms to BSI CP 6330:1983 (UK).
- Maintain records of all checks, remedial action and disposals.

## **Safety Standard Compliance**

After repairing a product which originally conformed to the Safety Class II (double insulated), the Insulation Resistance and / or Leakage Current with the product switched on must be checked to VDE 0701 or to the National Safety Regulations quoted above.

The products covered by these Instructions conform to the Safety Class II, as identified by the symbol:



<u>Warning:</u> After repairs are carried out to parts within this product, the Safety Instructions given in VDE 0701 (Repair Instructions) and / or VDE 0860 / IEC 65 / EN 60065 (Product Specification) must be observed.

<u>/</u>!\

Components conforming to IEC or VDE Approval Specification! For replacement purposes, use parts with the same specification only!

MOS Observe the requirements when handling MOS Components!

## **Electrical Safety after repairs**

According to the Product Liability Laws, the Manufacturer is responsible for ensuring that the product presents no danger to the user when used correctly. This risk is especially important with products which are operated from the mains voltage supply. To ensure that safety parameters are maintained especially after repairs have been carried out, it is imperative that the product is tested as specified in a recognised Test Procedure.

#### 1. Products conforming to Safety Class I (earthed, Symbol (\_\_\_))

Earth lead Test.

Check that the earth lead performs its function by using a Continuity Tester. For this integrity of the connection (conduction of current) from the protection lead contact in the plug to all metal parts that can be touched, with the product switched on and with it switched off, must be proved. A maximum of  $0.3\Omega$  is permitted for the resistance of a connecting lead with a length of up to 5 metres.

#### 2. Products conforming to Safety Class II (insulated, Symbol )

Insulating resistance measurements as specified in VDE 0701/Part 200.

The insulation resistance between all electrical functioning stages and metallic cabinet parts that can be touched must be proved.

#### Measurement of the Insulation Resistance to VDE 0701

Connect an Insulation Test Meter ( $U_{test} = 500 \text{V DC}$ ) to both mains poles simultaneously and between the cabinet and all other functional parts (aerial and connecting sockets, buttons, decorative trims, screws, etc.) made from metal or metal alloy. The product is fault free if:

$$R_{isol} > 2M\Omega$$
 at  $U_{test} = 500V$  DC  
Measuring time: > 1s

Note: The Insulation Resistance in some Safety Class II products can be <  $2M\Omega$ , depending upon construction and the value of discharge resistors. In these cases, the Leakage Current is significant and must be checked.

#### Gen. Part

#### Measurement of the Leakage Current to VDE 0701

Connect a Leakage Current Meter ( $U_{test}$  = 220V AC\*) to both mains poles simultaneously and between the cabinet and all other functional parts (aerial and connecting sockets, buttons, decorative trims, screws, etc.) made from metal or metal alloy. The product is fault free if:

- \* As, at the time of preparing these Safety Instructions, there is no British Standard Institute Standard that is equivalent to VDE 0701, use a test voltage of 240V AC.
- For testing to VDE 0701 / IEC 65 / BS 415 etc. we recommend that the measurements are carried out using the PAC 500, PAT 1000, PAT 2000, Metratester 4/5 or suitable equipment. These can be obtained from:

e.g. Seaward Electronic Ltd

Bracken Hill, South West Ind Est

Peterlee Co Durham SR8 2JJ

Telephone: 0191-5863511

e.g. Gossen-Metrawatt GmbH Thomas-Mann-Str. 16-20 D-90471 Nürnberg

Note: Models quoted may be superceded with new models with the passage of time.

- The PAC provides an initial indication of a "pass" or "fail" and is also suitable for mobile (field service) use, and the PAT units are designed for in-house use and for the maintenance of records and other professional uses and are compatible with most PC systems.
- If the safety of the product is not proven because:
  - a repair and full restoration is not physically or economically possible
  - or if the user / owner requests that repairs are not to be carried out,
     the user / owner must be given a written warning of the risk!
- Observe the conditions given in the "Safety Instructions" section.

## Important Advice and Safety Tests relevant to Service Repairs

- Service repairs must be carried out only by qualified personnel.
- Observe the VDE and National Safety Regulations as applicable.
- Operate line / mains powered units via an isolating transformer.
- Connect external aerials via an aerial isolating element.
- After repair, activate all protective circuits put out of operation.
- Before complete re-assembly of the unit restore the wiring to the original condition.
- Wear the protective clothing as required for repairs on picture tubes.
- Discharge the picture tube before dismantling it.
- When handling picture tubes avoid mechanical shocks to the tube (risk of implosion).





## **Important Safety Instructions**

Attention: Please observe the applicable safety requirements according to VDE 0701 (concerning repairs) and

VDE 0860 / IEC 65 / EN 60065 (concerning type of product)!

Components to IEC or VDE guidelines! Only use components with the same specifications for replacement!

MOS Observe MOS components handling instructions when servicing!

**Attention**: This appliance can only be operated from AC mains of 120V/60 Hz. Also observe the information given

on the rear of the set.



CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE FUSES!

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage", within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions The safety and operating instructions should be retained for future reference.
- Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.
- Follow Instructions All operating and user instructions should be followed.
- Water and Moisture The appliance should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- Wall or Ceiling Mounting The appliance should be mounted to wall or ceiling only as recommended by the manufacturer.
- Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may obstruct the flow of air through the ventilation openings.

Gen. Part

- Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- Power Sources The appliance should be connected to a power supply only of the type given above or as marked on the appliance.
- Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or
  pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience
  receptacles, and the point where they exit from the appliance.
- Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- x1 Power Lines An outdoor antenna should be located away from power lines.
- x2 Outdoor Antenna Grounding If an outside antenna is connected to the receiver, be sure the antenna system
  is grounded so as to provide some protection against voltage surges and built up static voltages. Section 810
  of the National Electrical Code, ANSI / NFPA No. 70-1984, provides information with respect to proper
  grounding of the mast and supporting structure, grounding of the lead-in wire to the antenna discharge unit,
  size of the grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and
  requirements for the grounding electrode.
- Nonuse Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- Damage Requiring Service The appliance should be serviced by qualified service personnel when: The
  power-supply cord or the plug has been damaged; or objects have fallen, or liquid has been spilled into the
  appliance; or the appliance has been exposed to rain; or the appliance does not appear to operate normally
  or exhibits a marked change in performance; or the appliance has been dropped, or the enclosure damaged;
  or the batteries have been damaged.
- Servicing the user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Items x1 and x2 apply only to receivers, tuners and TV sets.

Gen. Part

1.20 Grundig Service

#### Gen. Part

#### **LASER Safety**

The MOS safety requirements must be met because many components, particularly the laser diode, are very sensitive to static electricity.

The pick-up unit incorporates many precision components and should therefore be protected against high temperatures, high humidity, strong magnetic fields, mechanical shocks and dust.

- The CD Player belongs to the category of products with a low-power LASER.
- According to DIN VDE 0837 or IEC 825 it is a Class 1 LASER meaning that the output power limits are determined by the design. The LASER DIODE must not be operated outside the pick-up since the output power increases by many times (Class 3B) and will cause injuries to the eye. In this case the use of LASER protective goggles is strictly recommended.
- Due to the lens system of the LASER pick-up the focal point of the LASER light is about 1.5mm above the focus lens. The focal point is located low enough to allow the LASER to be looked at with unprotected eyes.
- Avoid looking at the LASER using external optical means such as, for example, a magnifying glass because the focal point will be projected onto the retina and may cause injuries to the eye.
- The LASER light appears on the focus lens of the pick-up as a dark-red spot when looking at the optical system at an angle, preferably at low ambient brightness.
- By placing a sheet of transparent paper onto the focus lens the LASER spot is projected onto the back of the sheet and is well perceivable.

In general, built-in safety locks ensure that the LASER does not operate with an open disc compartment cover. In consideration of the above instructions, the special safety locks can be made ineffective and the LASER will be visible as a small red spot.

Safety Standard Classes for the LASER (according to DIN IEC 825 / VDE 0837)

#### Class 1

Not dangerous for the human eye. Maximum output power eg: at 700nm...69µW.



#### Class 3 B

Dangerous for the human eye and, in special cases, for the skin. Maximum radiation power up to 0.5W.



FALLS ERFORDERLICH IF APPLICABLE HVIS NØDVENDIG HVIS DET KREVES

The output of laser light from a CD pick-up unit corresponds to Class 1. If the laser diode is operated outside pick-up unit, this corresponds to operation under Class 3 B.

VARNING! OM APPARATEN ANVÄNDS PÅ SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FOR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FOR LASERKLASS 1. VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT DEM STRAHL AUSSETZEN.

CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

ADVARSEL – UNSYNLIG LASERSTRALING NAR DEKSEL APENS UNNGA EKSPONERING FOR STRALEN.

ADVARSEL – UNSYNLIG LASER STRÅLING VED ÅBNING. UNDGÅ UDSETTELSE FOR STRÅLING.

VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

VARO – AVETTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALITTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTOOHJEESA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN I YLITTÄVÄLLE NÄKYMÄTTOMÄLLE LASERSATEILYLLE.

#### Safety Advice for Lithium Batteries

#### Warning! Lithium Batteries:

Incorrectly used lithium batteries (excessive heat, reversed connection of terminals, short circuit) represent a danger of explosion!

Lithium batteries must be replaced only by the original spare part (see Spare Parts List).

Please observe the appropriate disposal regulations for exhausted lithium batteries.



#### Adversel!

Lithiumbatteri. Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.



#### Varning

Eksplosionsfara vid felaktigt batteribyte. Ånvänd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens instruktion.



#### **Varoitus**

Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.



#### Handling of MOS Chip Components

Circuits containing MOS devices require special and careful handling to protect them from damage by static charges. Static charges can build up on all highly insulated plastics, can be transferred to persons wearing clothes and shoes made from synthetic materials and from them to the MOS devices.

Protection circuits in the inputs and outputs of MOS devices provide only a limited degree of protection and this is due to their reaction time.

Please observe the following instructions to protect these components from damage by static charges:

- 1. Retain MOS components in their conductive packages until they are required for use. MOS components must never be stored or transported in Styroper materials or in plastic magazines.
- 2. Personnel handling MOS components must first discharge any electrostatic charge on their body or clothing by touching a grounded object.
- 3. Handle the MOS device by the body and do not touch the terminals / pins.
- 4. Use earthed instruments only for testing and processing purposes.
- 5. Removal of, or making contact with, MOS ICs fitted into sockets must only be carried out with the operating voltage disconnected.
- 6. Circuits containing p-channel MOS components must not be connected to positive voltages (with reference to the substrate connection VSS).

## **MOS Soldering Instructions**

- Use mains-isolated low-voltage soldering irons only.
- Maximum soldering period is 5 sec with a soldering iron temperature of 300°C to 400°C.

#### Gen. Part

### **CHIP Technology**

#### Soldering and unsoldering of CHIP components

- Use only low-voltage soldering irons with temperature control.
- Permissible soldering temperatures are approx. 240°C up to max. 300°C.
- Keep the soldering period as short as possible.
- Keep the CHIP components in their original packages until they are used to avoid oxidation of the end contacts.
- Do not touch CHIP components with bare hands.

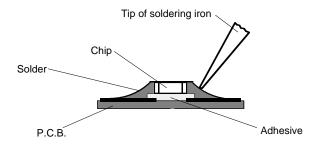
#### **Unsoldering of CHIP components**

- 1. step: Clean the CHIP soldering point with a solder wick (Fig. 1).
- 2. step: Warm up the ends of the CHIP or the whole CHIP component and remove the CHIP from the adhesive by turning it without application of force so that the tracks beneath the CHIP do not break (Fig. 2).

# Attention! Never use unsoldered CHIPS again! The conductive layer may be broken.

#### **Soldering of CHIP components**

- 3. step: Remove any remaining residues from the soldering point. Then apply a bead of solder (Fig. 3).
- 4. step: Place the CHIP onto the soldering point, then center and fix it (Fig. 4).
- 5. step: Solder the free end of the CHIP and resolder the first soldering point after it has cooled (Fig. 5).



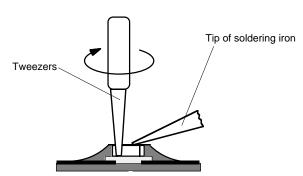


Fig. 1

Fig. 2

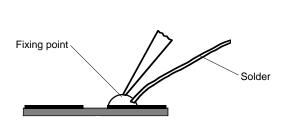
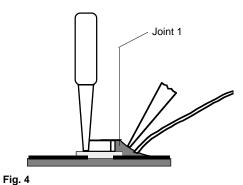


Fig. 3



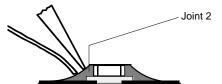


Fig. 5

More detailed information on the SMD soldering technology is given in the service brochure "SMD Soldering Technology" – ① – obtainable under the part no. 72008-499.98.

# GRUNDIG

# ISDN - InfoTip

The common

Service Communication System in the

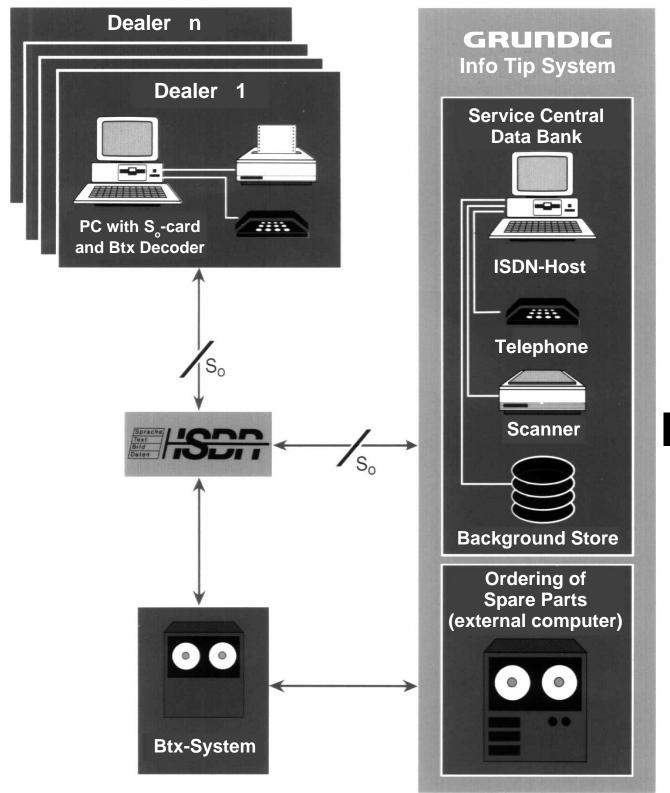
**Entertainment Electronics Industry!** 



**GRUNDIG** and members of the industrial association of entertainment electronics within the ZVEI (Central Association of the Electrotechnical Industry) offer the specialised dealers

# "ISDN-Info Tip"

as a future-orientated communication system.



Gen. Part

# ISDN - InfoTip Germany

## 1. The System, the Services

#### **Communication medium:**

ISDN net of the German Federal Postal Administration - Telekom

#### **General benefit of ISDN:**

eight services in one net international network two exchange lines usable at the same time for different services high bit rate: 64 kBit/s

## Preconditions for the specialised dealer:

ISDN connection
PC 386 at least, DOS or Windows, VGA
(fixed disk, ca. 3 MB for each provider)
ISDN Controller Card
ISDN-InfoTip Software

# Expenses accruing for the specialised dealer:

ISDN connection (single payment)
ISDN Controller Card
InfoTip Software
ISDN-InfoTip annual fee

For further particulars and information on prices please contact the Info-Tip Service GmbH. Hotline 0180 567 3042.

Gen. Part

1.26 Grundig Service

## 1. The Systems, the Services

## Services of ISDN-Info-Tip

Service repair tips

Product information

Programme update via ISDN

Data update via ISDN

Spare parts lists

Ordering of spare parts

Survey of product types

Retrofitting options

Extracts from circuit diagrams DIN A 4

Exploded views DIN A4

Print layouts DIN A4

Flow charts, tables DIN A4

# 2. Benefit to the specialised dealer

- uniform system spanning a multitude of manufacturers
- uniform easy-to-operate control interface
- special knowledge of manufacturers up-to-date and everywhere available
- Information and placing orders around the clock
- characteristic information specific to the brand is maintained
- complete solution of problems with one system: symptom - check - repair tips ordering of spare parts - documents
- no delays on the telephone
- the dealer's competence is decisively increased
- saves time and costs, mainly offline use
- high acceptance is guaranteed by a common system

Gen. Part

# **Grundig Universal Remote Controls**



TV Control 1 Part No: 72011-601.00

replaces the following types:

| Туре            | Code |
|-----------------|------|
| TP Easy         | 102  |
| TP 621          | 101  |
| TP 622          | 101  |
| TC 622          | 101  |
| RC 622          | 101  |
| TP 623          | 102  |
| TP 661          | 103  |
| RC 661          | 103  |
| TP 661 Top      | 104  |
| RC 661 Top      | 104  |
| TP 661 Fasttext | 104  |
| TP 663          | 105  |
| TP 911          | 103  |
| TP 911 Top      | 104  |
|                 |      |

and variant versions

1.28 Grundig Service







# TV Control 2 Part No: 72011-602.00

replaces the following types:

| Туре              | Code |
|-------------------|------|
| TVP 1             | 122  |
| TVP 2             | 123  |
| TP 15             | 117  |
| TP 85             | 113  |
| TP 200            | 113  |
| TP 300            | 113  |
| TP 300 Text       | 113  |
| TP 310            | 113  |
| TP 360            | 113  |
| TP 370            | 113  |
| TP 380            | 113  |
| TP 390            | 115  |
| TP 400            | 113  |
| TP 500 Antiope    | 114  |
| TP 500 AT Antares | 113  |
| TP 500            | 113  |
| TP 590 VT         | 115  |
| TP 600            | 115  |
| TP 610            | 116  |
| TP 611            | 116  |
| RC 611            | 116  |
| TP 630            | 116  |
| TP 650            | 116  |
| TC 650            | 116  |
| TP 660            | 116  |
| TC 660            | 116  |
| TP 660 Top/Fast   | 119  |
|                   |      |

and variant versions



# **Video Control 1 Part No: 72011-610.00**

replaces the following types:

| Туре   | Code |
|--------|------|
| RP 4   | 205  |
| RP 6   | 201  |
| RC 6   | 201  |
| RP 50  | 205  |
| VP 386 | 202  |
| VP 615 | 206  |
| RC 615 | 206  |
|        |      |

and variant versions

Gen. Part



# **SAT Control 1**Part No: 72011-620.00

replaces the following types:

| Туре       | Code |
|------------|------|
| TP DSR     | 302  |
| RC SAT     | 301  |
| RC 200 SAT | 301  |
| RC 201     | 301  |
| RC 212     | 301  |
| RC 300     | 301  |
|            |      |

and variant versions

Gen. Part



# Video Control LCD Part No: 72011-615.00

replaces the following types:

| Туре       | Code |
|------------|------|
| RP 5 LCD   | 1    |
| RP 6 LCD   | 1    |
| RP 13 LCD  | 2    |
| RP 20 LCD  | 3    |
| RP 25 LCD  | 4    |
| RP 30 LCD  | 5    |
| RP 33 LCD  | 6    |
| RP 35 LCD  | 6    |
| RC 60 LCD  | 7    |
| RP 65 LCD  | 1    |
| RP 70 LCD  | 1    |
| RC 70 LCD  | 1    |
| RC 75 LCD  | 7    |
| RP 75 LCD  | 7    |
| RP 85 LCD  | 8    |
| RP 90 LCD  | 7    |
| RP 95 LCD  | 7    |
| RP 130 LCD | 2    |
|            |      |

The handling of the remote controls not mentioned above remains unchanged.

Due to the actuality of the Series 700 remote controls, the total range of these controls will continue to be offered in the original version.

and variant versions

We recommend our dealers to build up appropriate stocks of these four types for immediate customer support in the case of repairs.

The remote controls are offered in a pleasing sales packing with all operating and coding information printed on it.



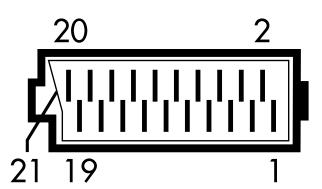
# **Pinning of Sockets and Plugs**

## **Pinning of the EURO-AV Socket**

The following table helps your dealer to establish a standard connection of your television receiver to additional equipment on request (e.g. computer, amplifier):

| Pin |   | Signal                       |
|-----|---|------------------------------|
| 1   | = | Audio output right           |
| 2   | = | Audio input right            |
| 3   | = | Audio output left            |
| 4   | = | Audio ground                 |
| 5   | = | Blue ground                  |
| 6   | = | Audio input left             |
| 7   | = | RGB blue input               |
| 8   | = | Switching voltage            |
| 9   | = | Green ground                 |
| 10  | = | Data lead MEGALOGIC          |
| 11  | = | RGB green input              |
| 12  | = | _                            |
| 13  | = | Red ground                   |
| 14  | = | Ground                       |
| 15  | = | RGB red input                |
| 16  | = | RGB switching voltage        |
| 17  | = | Video ground                 |
| 18  | = | RGB switching voltage ground |
| 19  | = | Video output                 |
| 20  | = | Video input                  |
| 21  | = | Shielding/ground             |
|     |   |                              |

Gen. Part



## **Pinning of Hosiden Socket (S-Video)**

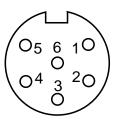
| Pin |   | Signal        |
|-----|---|---------------|
| 1   | = | Ground        |
| 2   | = | Ground        |
| 3   | = | Y-signal      |
| 4   | = | Chroma signal |



## **Pinning of DIN-AV Socket**

| Pin |   | Signal                              |
|-----|---|-------------------------------------|
| 1   | = | Switching voltage on playback       |
| 2   | = | CCVS signal                         |
| 3   | = | Ground                              |
| 4   | = | Audio left                          |
| 5   | = | Operating voltage for video adapter |

Audio right



Draufsicht



6

## **Pinning of DIN-Audio Socket**

| Pin |   | Signal                 |                         |
|-----|---|------------------------|-------------------------|
| 1   | = | Record left and mono   | (03_ 10)                |
| 2   | = | Ground                 | \ 0 <sup>5</sup> 2 40 / |
| 3   | = | Playback left and mono | 0                       |
| 4   | = | Record right           | Draufsicht              |
| 5   | = | Playback right         | 2.44.5.5.1              |

## **Contact Configuration of Jack Plug**

| Conta | ct | Signal   |          |
|-------|----|----------|----------|
| 1     | =  | Ground   | 1 2 3    |
| 2     | =  | AF right | <u> </u> |
| 3     | =  | AF left  |          |

#### Gen. Part

## **Pinning of ISO Standard Connector Blocks for Car Radios**

(I: Additional connector block for Grundig products only)

### I: Additional block

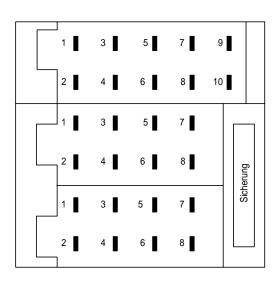
| Pin |   | Signal        |
|-----|---|---------------|
| 1   | = | TXD           |
| 2   | = | RXD           |
| 3   | = | +A CD changer |
| 4   | = | +U CD changer |
| 5   | = | GND (ground)  |
| 6   | = | GND (ground)  |
| 7   | = | Line out FR   |
| 8   | = | Line out RR   |
| 9   | = | Line out FL   |
| 10  | = | Line out RL   |

## II: Loudspeaker connector block

| Pin |   | Signa | ıl            |
|-----|---|-------|---------------|
| 1   | = | RR+   | (rear right)  |
| 2   | = | RR-   | (rear right)  |
| 3   | = | FR+   | (front right  |
| 4   | = | FR-   | (front right) |
| 5   | = | FL+   | (front left)  |
| 6   | = | FL-   | (front left)  |
| 7   | = | RL+   | (rear left)   |
| 8   | = | RL-   | (rear left)   |

## III: Power supply connector block

| Pin |   | Signal                |
|-----|---|-----------------------|
| 1   | = | SCV                   |
| 2   | = | Telephone mute        |
| 3   | = | not used              |
| 4   | = | Ignition (contact 15) |
| 5   | = | Automatic aerial      |
| 6   | = | Illumination          |
| 7   | = | +14V (contact 30)     |
| 8   | = | GND (ground)          |
|     |   |                       |



Top View

I: Additional block

II: Loudspeaker connector block

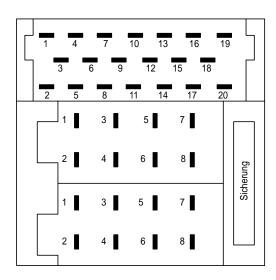
III: Power supply connector block

## **Pinning of ISO Standard Connector Blocks for Car Radios**

(I: Additional connector block for Grundig products only)

| I: Additional connector block |   | II: Lou       | II: Loudspeaker connector block |         |                       |
|-------------------------------|---|---------------|---------------------------------|---------|-----------------------|
| Stift                         |   | Signal        | Pin                             |         | Signal                |
| 1                             | = | Line out RL   | 1                               | =       | RR+ (rear right)      |
| 2                             | = | Line out RR   | 2                               | =       | RR- (rear right)      |
| 3                             | = | Line out GND  | 3                               | =       | FR+ (front right      |
| 4                             | = | Line out FL   | 4                               | =       | FR- (front right)     |
| 5                             | = | Line out FR   | 5                               | =       | FL+ (front left)      |
| 6                             | = | +Booster      | 6                               | =       | FL- (front left)      |
| 7                             | = | RXD           | 7                               | =       | RL+ (rear left)       |
| 8                             | = | TXD           | 8                               | =       | RL- (rear left)       |
| 9                             | = | GND           |                                 |         |                       |
| 10                            | = | Subwoofer AF  | III: Pov                        | wer sup | ply connector block   |
| 11                            | = | Aux IN        | Pin                             |         | Signal                |
| 12                            | = | Aux GND       | 1                               | =       | SCV                   |
| 13                            | = | CD bus        | 2                               | =       | Telephone mute        |
| 14                            | = | not used      | 3                               | =       | not used              |
| 15                            | = | CD bus GND    | 4                               | =       | Ignition (contact 15) |
| 16                            | = | +A CD changer | 5                               | =       | Automatic aerial      |
| 17                            | = | +U CD changer | 6                               | =       | Illumination          |
| 18                            | = | CD-AF GND     | 7                               | =       | +14V (contact 30)     |
| 19                            | = | CD-AF left    | 8                               | =       | GND (ground)          |
| _ 20                          | = | CD-AF right   |                                 |         |                       |





Top View

I: Additional block

II: Loudspeaker connector block

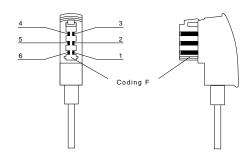
III: Power supply connector block

1.36 Grundig Service

# TAE-plug (F-coded) with integrated Western socket

Standardized contact configuration (TAE-plug)

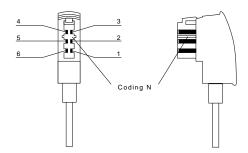
1 --> A 4 --> E 2 --> B 5 --> NC 3 --> W2 6 --> NC (NC = not connected)



# TAE-plug (N-coded) with integrated Western socket

Standardized contact configuration (TAE-plug)

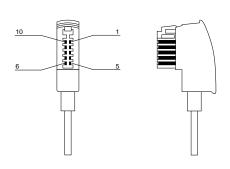
1 --> A 4 --> E 2 --> B 5 --> B1 3 --> W2 6 --> A1



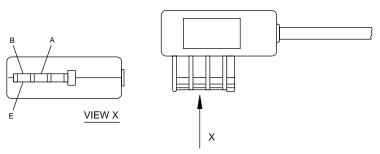
#### Connecting plug for Austrian variant

Contact configuration

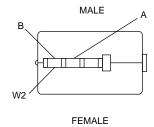
1 --> A 6 --> B1 2 --> E 7 --> NC 3 --> W2 8 --> NC 4 --> NC 9 --> NC 5 --> B 10 --> A1 (NC = not connected)

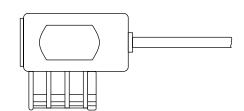


#### Connecting plug for French variant 1



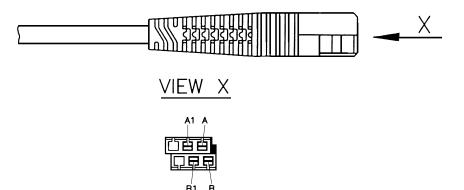
#### Connecting plug for French variant 2



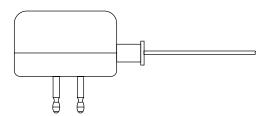


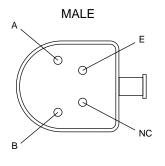
E B1 Gen. Part

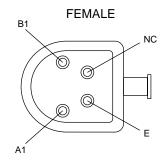
#### Connecting plug for Swiss variant



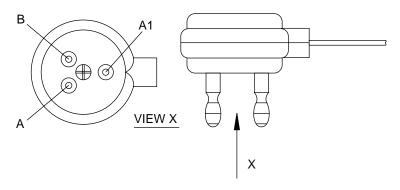
#### Connecting plug for Dutch variant



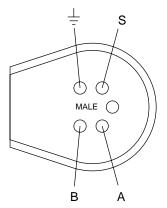


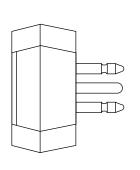


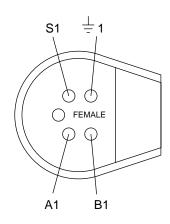
#### Connecting plug for Italian variant



#### Connecting plug for Belgian Variant







Gen. Part

# **Contents TV**

| Frequencies and Standards                                      | 2.2  |
|--|------|
| Television Standards of the World                              | 2.6  |
| Channel Number Indication - Special Channels                   | 2.10 |
| Hyperband in Germany   | 2.11 |
| Channel Survey   | 2.12 |
| Chassis Chart  | 2.13 |
| Module Chart:  |      |
| 1993/1994 TV Models  | 2.19 |
| 1994/1995 TV Models  | 2.23 |
| 1995/1996 TV Models  | 2.27 |
| 1996/1997 TV Models  | 2.30 |
| 1997/1998 TV Models  | 2.34 |
| Tele-Pilot® Remote Control Handsets / Types                    | 2.37 |
| Retro-fitting Options for Colour Television Receivers          | 2.38 |
| Which Teletext Decoder for which Generation of TV Receivers    | 2.49 |
| Retro-fitting of Built-in Satellite Receiver SER 7300          | 2.50 |
| Retro-fitting of Built-in Satellite Receiver SER 6350          | 2.51 |
| Retro-fitting of Built-in Satellite Receiver SER 150/SER 151 E | 2.52 |
| Special Functions of Colour TV Receivers                       | 2.53 |
| Service Manuals from 1992 onwards                              | 2.62 |

# Frequencies and Standards

## **Frequency Allocation**

| 151 - 285 kHz   | 2001 - 1050 m         | Long Wave       |
|-----------------|-----------------------|-----------------|
| 536 - 1605 kHz  | 560 - 189 m           | Medium Wave     |
| 5,95 - 26,1 MHz | 50 - 11,5 m           | Short Wave      |
| 41 - 68 MHz     | Channel Width 7 MHz   | VHF-TV Band I   |
| 87,5 - 108 MHz  | Channel Width 100 kHz | VHF-UKW Band II |
| 174 - 223 MHz   | Channel Width 7 MHz   | VHF-TV Band III |
| 470 - 606 MHz   | Channel Width 8 MHz   | UHF-TV Band IV  |
| 606 - 854 MHz   | Channel Width 8 MHz   | UHF-TV Band V   |

#### **General Television Standards**

| Standard | Lines | Channel<br>Width | Video<br>Band- | Vision/<br>Sound | Residual<br>Side- | Colour<br>Sub- | Vision<br>Modu- | Sound<br>Modu- |
|----------|-------|------------------|----------------|------------------|-------------------|----------------|-----------------|----------------|
|          |       | in MHz           | width          | Spacing          | band              | carrier        | lation          | lation         |
|          |       |                  | in MHz         | in MHz           | in MHz            | in MHz         |                 |                |
|          |       |                  |                |                  |                   | (PAL)          |                 |                |
| Α        | 405   | 5                | 3              | -3,5             | 0,75              | -              | Pos             | AM             |
| В        | 625   | 7                | 5              | + 5,5            | 0,75              | 4,43           | Neg             | FM             |
| С        | 625   | 7                | 5              | + 5,5            | 0,75              | 4,43           | Pos             | AM             |
| D        | 625   | 8                | 6              | + 6,5            | 0,75              | -              | Neg             | FM             |
| E        | 819   | 14               | 10             | + 11,15          | 2                 | -              | Pos             | AM             |
| F        | 819   | 7                | 5              | + 5,5            | 0,75              | -              | Pos             | AM             |
| G        | 625   | 8                | 5              | + 5,5            | 0,75              | 4,43           | Neg             | FM             |
| Н        | 625   | 8                | 5              | + 5,5            | 1,25              | 4,43           | Neg             | FM             |
| I        | 625   | 8                | 5,5            | + 6,0            | 1,25              | 4,43           | Neg             | FM             |
| K        | 625   | 8                | 6              | + 6,5            | 0,75              | 4,43           | Neg             | FM             |
| K′       | 625   | 8                | 6              | + 6,5            | 1,25              | 4,43           | Neg             | FM             |
| L        | 625   | 8                | 6              | + 6,5            | 1,25              | 4,43           | Pos             | AM             |
| M        | 525   | 6                | 4,2            | + 4,5            | 0,75              | 3,576 *)       | Neg             | FM             |
| N        | 625   | 6                | 4,2            | + 4,5            | 0,75              | 3,582          | Neg             | FM             |

Picture frequency 50 Hz, only Standard M 60 Hz

\*) NTSC = 3,579 MHz

## Band IV/V - Standards for Europe and Africa

(only 625 lines, 8 MHz channel bandwidth)

| Standard | Video<br>Band-<br>width<br>MHz | Vision/<br>Sound<br>Spacing<br>MHz | Residual<br>Side-<br>band<br>MHz | Vision<br>Modu-<br>lation | Sound<br>Modu-<br>lation<br>MHz | Colour<br>Sub-<br>carrier | Picture/<br>Sound<br>Ratio |
|----------|--------------------------------|------------------------------------|----------------------------------|---------------------------|---------------------------------|---------------------------|----------------------------|
| G        | 5                              | 5,5                                | 0,75                             | Neg                       | FM                              | 4,43                      | 5:1                        |
| Н        | 5                              | 5,5                                | 1,25                             | Neg                       | FM                              | 4,43                      | 5:1                        |
| 1        | 5,5                            | 6                                  | 1,25                             | Neg                       | FM                              | 4,43                      | 5:1                        |
| K        | 6                              | 6,5                                | 0,75                             | Neg                       | FM                              | 4,43                      | 5:1                        |
| L        | 6                              | 6,5                                | 1,25                             | Pos                       | AM                              | 4,43                      | 8:1                        |

### **Satellite Bands**

| Designation | Frequency Range |  |
|-------------|-----------------|--|
|             | GHz             |  |
| C-Band      | 3,6-4,2         |  |
| Ku-Bands    | 10,7-12,75      |  |

 $\mathsf{TV}$ 

2.2 Grundig Service

## **Standards and Channels**

| Standard A |                |              |       |                |              |
|------------|----------------|--------------|-------|----------------|--------------|
|            | Picture<br>MHz | Sound<br>MHz |       | Picture<br>MHz | Sound<br>MHz |
| Ch 1       | 45,0           | 41,5         | Ch 7  | 184,75         | 181,25       |
| Ch 2       | 51,75          | 48,25        | Ch 8  | 189,75         | 186,25       |
| Ch 3       | 56,75          | 53,25        | Ch 9  | 194,75         | 191,25       |
| Ch 4       | 61,75          | 58,25        | Ch 10 | 199,75         | 196,25       |
| Ch 5       | 66,75          | 63,25        | Ch 11 | 204,75         | 201,25       |
| Ch 6       | 179 75         | 176 25       | Ch 12 | 209.75         | 206.25       |

| Standard B/C/F/0 | Sta | ndar | d B | /C | Æ, | /G |
|------------------|-----|------|-----|----|----|----|
|------------------|-----|------|-----|----|----|----|

| Standard B/C/F/G |                       |        |       |         |        |  |  |
|------------------|-----------------------|--------|-------|---------|--------|--|--|
|                  | Picture               | Sound  |       | Picture | Sound  |  |  |
|                  | MHz                   | MHz    |       | MHz     | MHz    |  |  |
|                  | Band I                |        | Ch 37 | 599,25  | 604,75 |  |  |
| Ch 1             | 46,25                 | 51,75  | Ch 38 | 607,25  | 612,75 |  |  |
| Ch 2             | 48,25                 | 53,75  | Ch 39 | 615,25  | 620,75 |  |  |
| Ch 3             | 55,25                 | 60,75  | Ch 40 | 623,25  | 628,75 |  |  |
| Ch 4             | 62,25                 | 67,75  | Ch 41 | 631,25  | 636,75 |  |  |
|                  |                       |        | Ch 42 | 639,25  | 644,75 |  |  |
|                  | Band III              |        | Ch 43 | 647,25  | 652,75 |  |  |
| Ch 5             | 175,25                | 180,75 | Ch 44 | 655,25  | 660,75 |  |  |
| Ch 6             | 182,25                | 187,75 | Ch 45 | 663,25  | 668,75 |  |  |
| Ch 7             | 189,25                | 194,75 | Ch 46 | 671,25  | 676,75 |  |  |
| Ch 8             | 196,25                | 201,75 | Ch 47 | 679,25  | 684,75 |  |  |
| Ch 9             | 203,25                | 208,75 | Ch 48 | 687,25  | 692,75 |  |  |
| Ch 10            | 210,25                | 215,75 | Ch 49 | 695,25  | 700,75 |  |  |
| Ch 11            | 217,25                | 222,75 | Ch 50 | 703,25  | 708,75 |  |  |
| Ch 12            | 224,25                | 229,75 | Ch 51 | 711,25  | 716,75 |  |  |
|                  |                       |        | Ch 52 | 719,25  | 724,75 |  |  |
|                  | d IV/V acc. to Standa | ard H  | Ch 53 | 727,25  | 732,75 |  |  |
| Ch 21            | 471,25                | 476,75 | Ch 54 | 735,25  | 740,75 |  |  |
| Ch 22            | 479,25                | 484,75 | Ch 55 | 743,25  | 748,75 |  |  |
| Ch 23            | 487,25                | 492,75 | Ch 56 | 751,25  | 756,75 |  |  |
| Ch 24            | 495,25                | 500,75 | Ch 57 | 759,25  | 764,75 |  |  |
| Ch 25            | 503,25                | 508,75 | Ch 58 | 767,25  | 772,75 |  |  |
| Ch 26            | 511,25                | 516,75 | Ch 59 | 775,25  | 780,75 |  |  |
| Ch 27            | 519,25                | 524,75 | Ch 60 | 783,25  | 788,75 |  |  |
| Ch 28            | 527,25                | 532,75 | Ch 61 | 791,25  | 796,75 |  |  |
| Ch 29            | 535,25                | 540,75 | Ch 62 | 799,25  | 804,75 |  |  |
| Ch 30            | 543,25                | 548,75 | Ch 63 | 807,25  | 812,75 |  |  |
| Ch 31            | 551,25                | 556,75 | Ch 64 | 815,25  | 820,75 |  |  |
| Ch 32            | 559,25                | 564,75 | Ch 65 | 823,25  | 828,75 |  |  |
| Ch 33            | 567,25                | 572,75 | Ch 66 | 831,25  | 836,75 |  |  |
| Ch 34            | 575,25                | 580,75 | Ch 67 | 839,25  | 844,75 |  |  |
| Ch 35            | 583,25                | 588,75 | Ch 68 | 847,25  | 852,75 |  |  |
| Ch 36            | 591,25                | 596,75 | Ch 69 | 855,25  | 860,75 |  |  |

### Standard D \*)

|      | Picture<br>MHz | Sound<br>MHz |       | Picture<br>MHz | Sound<br>MHz |
|------|----------------|--------------|-------|----------------|--------------|
| Ch 1 | 49,75          | 56,25        | Ch 7  | 183,25         | 189,75       |
| Ch 2 | 59,25          | 65,75        | Ch 8  | 191,25         | 197,75       |
| Ch 3 | 77,25          | 83,75        | Ch 9  | 199,25         | 205,75       |
| Ch 4 | 85,25          | 91,75        | Ch 10 | 207,25         | 213,75       |
| Ch 5 | 93,25          | 99,75        | Ch 11 | 215,25         | 221,75       |
| Ch 6 | 175,25         | 181,75       | Ch 12 | 223,25         | 229,75       |

<sup>\*)</sup> UHF channels and vision carrier, please see Standard B, sound carrier relative to vision carrier + 6.5 MHz in each case.

#### Standard E

|      | Picture<br>MHz | Sound<br>MHz |       | Picture<br>MHz | Sound<br>MHz |
|------|----------------|--------------|-------|----------------|--------------|
| Ch 2 | 52,4           | 41,25        | Ch 8  | 185,25         | 174,1        |
| Ch 4 | 65,55          | 54,4         | Ch 8A | 186,55         | 175,4        |
| Ch 5 | 164            | 175,15       | Ch 9  | 190,3          | 201,45       |
| Ch 6 | 173,4          | 162,25       | Ch 10 | 199,7          | 188,55       |
| Ch 7 | 177,15         | 188,3        | Ch 11 | 203,45         | 214,6        |
|      |                |              | Ch 12 | 212,85         | 201,7        |

#### Standard I

|   | Picture | Sound  |       | Picture   | Sound  |
|---|---------|--------|-------|-----------|--------|
|   | MHz     | MHz    |       | MHz       | MHz    |
| A | 45,75   | 51,75  |       |           |        |
| В | 53,75   | 59,75  |       | Band IV/V |        |
| С | 61,75   | 67,75  | Ch 21 | 471,25    | 477,25 |
| D | 175,25  | 181,25 | Ch 22 | 479,25    | 485,25 |
| E | 183,25  | 189,25 |       |           |        |
| F | 191,25  | 197,25 |       | up to *   |        |
| G | 199,25  | 205,25 |       |           |        |
| Н | 207,25  | 213,25 | Ch 67 | 839,25    | 845,25 |
| 1 | 215,25  | 221,25 | Ch 68 | 847,25    | 853,25 |

<sup>\*</sup> Channel allocation and vision carrier, please see Standard B. Sound carrier relative to vision carrier +6 MHz in each case.

Standard K' (French overseas territories)

|      | Picture | Sound  |      | Picture | Sound  |
|------|---------|--------|------|---------|--------|
|      | MHz     | MHz    |      | MHz     | MHz    |
| Ch 4 | 175,25  | 181,75 | Ch 7 | 199,25  | 205,75 |
| Ch 5 | 183,25  | 189,75 | Ch 8 | 207,25  | 213,75 |
| Ch 6 | 191,25  | 197,75 | Ch 9 | 215,25  | 221,75 |

## TV

### Standard M/N

|      | Picture | Sound  |       | Picture           | Sound  |
|------|---------|--------|-------|-------------------|--------|
|      | MHz     | MHz    |       | MHz               | MHz    |
| Ch 1 | -       | -      | Ch 8  | 181,25            | 185,75 |
| Ch 2 | 55,25   | 59,75  | Ch 9  | 187,25            | 191,75 |
| Ch 3 | 61,25   | 65,75  | Ch 10 | 193,25            | 197,75 |
| Ch 4 | 67,25   | 71,75  | Ch 11 | 199,25            | 203,75 |
| Ch 5 | 77,25   | 81,75  | Ch 12 | 205,25            | 209,75 |
| Ch 6 | 83,25   | 87,75  | Ch 13 | 211,25            | 215,75 |
| Ch 7 | 175,25  | 179,75 | Ch 14 | 471,25            | 475,75 |
|      |         |        |       | continually up to |        |
|      |         |        | Ch 83 | 885,25            | 889,75 |

2.4 Grundig Service

Channel Allocation - Italy (otherwise Standard B)

| onamici i micolancii i micolancii micolancii i i i |         |        |     |         |        |  |  |
|--|---------|--------|-----|---------|--------|--|--|
|  | Picture | Sound  |     | Picture | Sound  |  |  |
|  | MHz     | MHz    |     | MHz     | MHz    |  |  |
| Α  | 53,75   | 59,25  | Е   | 183,25  | 189,75 |  |  |
| В  | 62,25   | 67,75  | F   | 192,25  | 197,75 |  |  |
| С  | 82,25   | 87,75  | G   | 201,25  | 206,75 |  |  |
| D  | 175,25  | 180,75 | Н   | 210,25  | 215,75 |  |  |
|  |         |        | H 1 | 217.25  | 222.75 |  |  |

Channel Allocation - Morocco (otherwise Standard B)

|     | Picture | Sound  |      | Picture | Sound  |
|-----|---------|--------|------|---------|--------|
|     | MHz     | MHz    |      | MHz     | MHz    |
| M 4 | 163,25  | 168,75 | M 8  | 195,25  | 200,75 |
| M 5 | 171,25  | 176,75 | M 9  | 203,25  | 208,75 |
| M 6 | 179,25  | 184,75 | M 10 | 211,25  | 216,75 |
| M 7 | 187,25  | 192,75 |      | ·       | ·      |

Channel Allocation - Australia (otherwise Standard B)

|       | Picture | Sound  |       | Picture | Sound  |
|-------|---------|--------|-------|---------|--------|
|       | MHz     | MHz    |       | MHz     | MHz    |
| Ch 0  | 46,25   | 51,75  | Ch 6  | 175,25  | 180,75 |
| Ch 1  | 57,25   | 62,75  | Ch 7  | 182,25  | 187,75 |
| Ch 2  | 64,25   | 69,75  | Ch 8  | 189,25  | 194,75 |
| Ch 3  | 86,25   | 91,75  | Ch 9  | 196,25  | 201,75 |
| Ch 4  | 95,25   | 100,75 | Ch 10 | 209,25  | 214,75 |
| Ch 5  | 102,25  | 107,75 | Ch 11 | 216,25  | 221,75 |
| Ch 5A | 138,25  | 143,75 |       |         |        |

Channel Allocation - New Zealand (otherwise Standard B)

|      | Picture | Sound  |      | Picture | Sound  |
|------|---------|--------|------|---------|--------|
|      | MHz     | MHz    |      | MHz     | MHz    |
| Ch 1 | 45,25   | 50,75  | Ch 6 | 189,25  | 194,75 |
| Ch 2 | 55,25   | 60,75  | Ch 7 | 196,25  | 201,75 |
| Ch 3 | 62,25   | 67,75  | Ch 8 | 203,25  | 208,75 |
| Ch 4 | 175,25  | 180,75 | Ch 9 | 210,25  | 215,75 |
| Ch 5 | 182,25  | 187,75 |      |         |        |

Channel Allocation - Japan (otherwise Standard M)

|      | Picture | Sound  |       | Picture           | Sound  |
|------|---------|--------|-------|-------------------|--------|
|      | MHz     | MHz    |       | MHz               | MHz    |
| Ch 1 | 91,25   | 95,75  | Ch 10 | 205,25            | 209,75 |
| Ch 2 | 97,25   | 101,75 | Ch 11 | 211,25            | 215,75 |
| Ch 3 | 103,25  | 107,75 | Ch 12 | 217,25            | 221,75 |
| Ch 4 | 171,25  | 175,75 |       |                   |        |
| Ch 5 | 177,25  | 181,75 | Ch 33 | 591,25            | 595,75 |
| Ch 6 | 183,25  | 187,75 |       |                   |        |
| Ch 7 | 189,25  | 193,75 |       | continually up to |        |
| Ch 8 | 193,25  | 197,75 |       |                   |        |
| Ch 9 | 199,25  | 203,75 | Ch 62 | 765,25            | 769,75 |

## **Television Standards of the World**

(as far as known to us)

with indication of the mains voltage and mains frequency

| Country                     | b/w    | Colour      | Mains   | Mains     |
|-----------------------------|--------|-------------|---------|-----------|
| ,                           |        |             | Voltage | Frequency |
|                             |        |             | Volt    | Hz        |
| Egypt                       | B/H    | SECAM       | 110-220 | 50        |
| Ethiopia                    | B/G    | PAL         | 220     | 50        |
| Afghanistan                 | В      | PAL         | 220     | 50        |
| Albania                     | D      | SECAM       | 220     | 50        |
| Algeria                     | B/H    | PAL         | 127-220 | 50        |
| Angola                      | i i    | PAL         | 220     | 50        |
| Antigua                     | M      | NTSC        | 230     | 50        |
| Argentina                   | N 1)   | PAL         | 220     | 50        |
| Australia                   | B/H 1) | PAL         | 240-250 | 50        |
| Azores                      | В      | PAL         | 220     | 50        |
| Bahamas                     | M      | NTSC        | 120     | 60        |
| Bahrain                     | B      | PAL         | 230     | 50-60     |
| Bangladesh                  | В      | PAL         | 220-230 | 50        |
| Barbados                    | N      | NTSC        | 110-220 | 50        |
|                             | B/H    | PAL         | 220     | 50        |
| Belgium<br>Benin            | K′     | SECAM       | 220     | 50        |
|                             | M      | NTSC        |         | 60        |
| Bermuda                     | N      | NTSC        | 115-120 | 50-60     |
| Bolivia                     |        |             | 115-230 |           |
| Botswana                    | l 1)   | PAL         | 220     | 50        |
| Brazil                      | M      | PAL         | 110-220 | 50-60     |
| Brunei                      | В      | PAL         | 230     | 50        |
| Bulgaria                    | D/K    | SECAM (B/Z) | 220     | 50        |
| Burkina Fasso (Upper Volta) | K′     | SECAM       | 220     | 50        |
| Burma                       | M      | NTSC        | 220     | 50        |
| Burundi                     | K      | SECAM       | 220     | 50        |
| Chile                       | M      | NTSC        | 220     | 50        |
| China (People's Republic)   | D/K    | PAL         | 220     | 50        |
| Costa Rica                  | M      | NTSC        | 120     | 60        |
| Denmark                     | B/G    | PAL         | 220     | 50        |
| Germany                     | B/G    | PAL         | 230     | 50        |
| Diego Garcia                | M      | NTSC        |         |           |
| Djibouti                    | K′     | SECAM       | 220     | 50        |
| Dominican Republic          | M      | NTSC        | 110     | 60        |
| Ecuador                     | M      | NTSC        | 110-220 | 60        |
| Ivory Coast                 | K′     | SECAM (B)   | 220     | 50        |
| El Salvador                 | M      | NTSC        | 115     | 60        |
| Fiji Islands                | В      | PAL         | 240     | 50        |
| Finland                     | B/G    | PAL         | 220     | 50        |
| France                      | E/L    | SECAM (Z)   | 110-220 | 50        |
| Gabon                       | K′     | SECAM `     | 220     | 50        |
| Ghana                       | В      | PAL         | 220     | 50        |
| Gibraltar                   | В/Н    | PAL         | 240     | 50        |
| Greece                      | B/H    | SECAM (Z)   | 220     | 50        |
| Greenland                   | M      | NTSC        | 220     | 50        |
| Great Britain               | A/I    | PAL         | 210-240 | 50        |
| Guadeloupe                  | Κ΄     | SECAM       | 220     | 50        |

<sup>1)</sup> Channels are differing! (B) = Field identification (Z) = Line identification

2.6 Grundig Service

| Country                   | b/w      | Colour          | Mains   | Mains     |
|---------------------------|----------|-----------------|---------|-----------|
| ,                         |          |                 | Voltage | Frequency |
|                           |          |                 | Volt    | Hz        |
| Guam                      | М        | NTSC            |         |           |
| Guatemala                 | М        | NTSC            | 110-220 | 60        |
| Guinea Republic           | K′       | SECAM           | 220     | 50        |
| Guayana (French)          | K′       | SECAM           | 220     | 50        |
| GUS                       | D/K      | SECAM (B/Z)     | 127-220 | 50        |
| Haiti                     | M        | NTSC            | 110-220 | 50-60     |
| Hawaii                    | M        | NTSC            | 115     | 60        |
| Honduras                  | M        | NTSC            | 110-220 | 60        |
| Hong Kong                 | li       | PAL             | 200     | 50        |
| India                     | В        | PAL             | 220-250 | 50        |
| Indonesia                 | В        | PAL             | 110-220 | 50        |
| Iraq                      | В        | SECAM (Z)       | 220     | 50        |
| Iran                      | B/G      | SECAM (Z)       | 220     | 50        |
| Ireland (Republic)        | 15/5     | PAL             | 220     | 50        |
| Iceland                   | B/G      | PAL             | 220     | 50        |
| Israel                    | B/G      | PAL             | 230     | 50        |
| Italy                     | B/G      | PAL             | 127-220 | 50        |
| Jamaica                   | M        | NTSC            | 220     | 50        |
|                           | M 1)     | NTSC            | 100-200 | 50        |
| Japan                     | B/G      |                 | 220     |           |
| Jordan                    |          | PAL             |         | 50        |
| Virgin Islands            | M<br>D/C | NTSC            | 120     | 60        |
| Yugoslavia (former)       | B/G      | PAL             | 220     | 50        |
| Cambodia                  | M        | DAL             | 120-220 | 50        |
| Cameroon                  | B/G      | PAL             | 127-220 | 50        |
| Canada                    | M        | NTSC            | 120     | 60        |
| Canary Islands            | B/G      | PAL             | 127-220 | 50        |
| Kenya                     | В        | PAL             | 240     | 50        |
| Colombia                  | M        | NTSC            | 110-220 | 60        |
| Congo (Republic)          | K'       | SECAM           | 220     | 50        |
| Korea (People's Republic) | D        | SECAM           | 100-200 | 50        |
| Korea (Republic)          | M        | NTSC            | 100     | 60        |
| Cuba                      | M        | NTSC            | 115-120 | 60        |
| Kuwait                    | B/G      | PAL             | 240     | 50        |
| Laos                      | М        | PAL             | 127-220 | 50        |
| Lebanon                   | В        | SECAM (Z)       | 110-220 | 50        |
| Liberia                   | В        | PAL             | 120     | 60        |
| Libya                     | В/Н      | SECAM (Z)       | 127-230 | 50        |
| Luxembourg                | C/L      | PAL/SECAM (Z)   | 120-220 | 50        |
| Madagascar                | K′       | SECAM           | 127-220 | 50        |
| Madeira                   | В        | PAL             | 220     | 50        |
| Malaysia                  | B/G      | PAL             | 230-240 | 50        |
| Maldive Islands           | В        | PAL             | 230     | 50        |
| Malta                     | В/Н      | PAL             | 240     | 50        |
| Morocco                   | В/Н      | SECAM (B)       | 115-230 | 50        |
| Martinique                | K′       | SECAM (B)       | 220     | 50        |
| Mauritania                | K′       | SECAM           | 220     | 50        |
| Mauritius                 | В        | SECAM           | 230     | 50        |
| Mexico                    | М        | NTSC            | 110-220 | 60        |
| Monaco                    | E/L/G    | PAL/SECAM (B/Z) | 127-220 | 50        |
| Mongolia                  | D        | SECAM (B/Z)     | 220     | 50        |
| Mozambique                | В        | PAL             | 220     | 50        |

<sup>1)</sup> Channels are differing! (B) = Field identification (Z) = Line identification

| New Caledonia         K´         SECAM         220           New Zealand         B1)         PAL         230           Nicaragua         M         NTSC         120           Netherlands         B/G         PAL         220           Netherlands Antilles         M         NTSC         115-223           Niger         K´         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K´         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         110-220           Peru         M         NTSC         110-220 | Frequency Hz  50 50 60 50 50-60 50 50 50 50 50 50 50 50 50 50 50 50 |
|--|---|
| New Caledonia         K′         SECAM         220           New Zealand         B1)         PAL         230           Nicaragua         M         NTSC         120           Netherlands         B/G         PAL         220           Netherlands Antilles         M         NTSC         115-223           Niger         K′         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K′         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220     | 50<br>50<br>60<br>50-60<br>50<br>50<br>50<br>50<br>50<br>50<br>50   |
| New Zealand       B1)       PAL       230         Nicaragua       M       NTSC       120         Netherlands       B/G       PAL       220         Netherlands Antilles       M       NTSC       115-223         Niger       K′       SECAM       220         Nigeria       B/I       PAL       230         Norway       B/G       PAL       230         Burkina Fasso       K′       SECAM       220         Oman       B/G       PAL       220         Austria       B/G       PAL       220         Pakistan       B       PAL       220-230         Panama       M       NTSC       115-230         Paraguay       N       NTSC       220         Peru       M       NTSC       110-220  | 50<br>60<br>50<br>50-60<br>50<br>50<br>50<br>50<br>50<br>50<br>50   |
| Nicaragua         M         NTSC         120           Netherlands         B/G         PAL         220           Netherlands Antilles         M         NTSC         115-223           Niger         K'         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  | 60<br>50<br>50-60<br>50<br>50<br>50<br>50<br>50<br>50<br>50         |
| Netherlands         B/G         PAL         220           Netherlands Antilles         M         NTSC         115-223           Niger         K'         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220   | 50<br>50-60<br>50<br>50<br>50<br>50<br>50<br>50<br>50               |
| Netherlands Antilles         M         NTSC         115-223           Niger         K'         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220   | 50-60<br>50<br>50<br>50<br>50<br>50<br>50<br>50<br>50               |
| Niger         K'         SECAM         220           Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220   | 50<br>50<br>50<br>50<br>50<br>50<br>50<br>50                        |
| Nigeria         B/I         PAL         230           Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  | 50<br>50<br>50<br>50<br>50<br>50<br>50                              |
| Norway         B/G         PAL         230           Burkina Fasso         K'         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  | 50<br>50<br>50<br>50<br>50<br>50                                    |
| Burkina Fasso         K′         SECAM         220           Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220   | 50<br>50<br>50<br>50<br>60  |
| Oman         B/G         PAL         220           Austria         B/G         PAL         220           Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  | 50<br>50<br>50<br>60  |
| Austria       B/G       PAL       220         Pakistan       B       PAL       220-230         Panama       M       NTSC       115-230         Paraguay       N       NTSC       220         Peru       M       NTSC       110-220   | 50<br>50<br>60  |
| Pakistan         B         PAL         220-230           Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220   | 50<br>60  |
| Panama         M         NTSC         115-230           Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  | 60  |
| Paraguay         N         NTSC         220           Peru         M         NTSC         110-220  |   |
| Peru M NTSC 110-220  | 50  |
| Peru M NTSC 110-220  | 100   |
| Dhilippings A40 000  | 60  |
| Philippines M NTSC 110-220   | 60  |
| Poland D/K SECAM (B/Z) 220   | 50  |
| Portugal B/G PAL 110-220   | 50  |
| Puerto Rico M NTSC 120   | 60  |
| Quatar B PAL 240   | 50  |
| Rwanda K´ SECAM 220  | 50  |
| Rumania D/K PAL 220  | 50  |
| Zambia B PAL 220   | 50  |
| Samoa M NTSC 230   | 50  |
| Zanzibar I PAL 230   | 50  |
| Saudi Arabia B/G PAL/SECAM (Z) 127-230   | 50-60   |
| Sweden B/G PAL 127-220   | 50  |
| Switzerland B/G PAL 220  | 50  |
| Senegal K' SECAM 127-220   | 50  |
| Sierra Leone B PAL 220   | 50  |
| Singapore B/G PAL 230  | 50  |
| Somalia K′ 110-230   | 50  |
| Spain B/G PAL 127-220  | 50  |
| Sri Lanka B/H PAL 230  | 50  |
| St. Pierre and Miquel K' SECAM   |   |
| Republic of South Africa I1) PAL 220-230   | 50  |
| Sudan B PAL 240  | 50  |
| Surinam M NTSC 110-127   | 60  |
| Swaziland B/G PAL 230  | 50  |
| Syria B/H SECAM 115-220  | 50  |
| Tahiti K´ SECAM 120-240  | 60  |
| Taiwan M NTSC 110-220  | 60  |
| Tanzania B PAL 230   | 50  |
| Thailand B/G PAL 220   | 50  |
| Togo K' SECAM 127-220  | 50  |
| Trinidad and Tobago M NTSC 115-230   | 60  |
| Chad K' SECAM 220  | 50  |
| Czech / Slovakian Republic D/K PAL (F-1:SECAM) 220   | 50  |
| Turkey B/G PAL 110-220   | 50  |
| Tunisia B/G SECAM 127-220  | 50  |

<sup>1)</sup> Channels are differing! (B) = Field identification (Z) = Line identification

2.8 Grundig Service

|  | ١ | į | 1 |
|--|---|---|---|

| Country                  | b/w | Colour          | Mains   | Mains     |
|--------------------------|-----|-----------------|---------|-----------|
|                          |     |                 | Voltage | Frequency |
|                          |     |                 | Volt    | Hz        |
| Uganda                   | В   | PAL             | 240     | 50        |
| Hungary                  | D/K | PAL             | 220     | 50        |
| Uruguay                  | N   | PAL             | 220     | 50        |
| USA                      | M   | NTSC            | 110     | 60        |
| Venezuela                | M   | NTSC            | 120-240 | 60        |
| United Arab Emirates     | B/G | NTSC            | 220-240 | 50        |
| Vietnam                  | D/M | NTSC            | 120-230 | 50        |
| Yemen (Republic)         | В   | PAL             | 220     | 50        |
| Zaire                    | K′  | SECAM           | 220     | 50        |
| Central African Republic | K   | SECAM           | 220     | 50        |
| Zimbabwe                 | B/G | PAL             | 220-230 | 50        |
| Cyprus                   | B/G | SECAM (Z) + PAL | 240     | 50        |

(B) = Field identification (Z) = Line identification

#### Notes

- 1. For countries where several mains voltage levels are applicable because of regional differences, the lowest and highest value is given
- 2. Two mains frequencies are stated for countries where two frequencies are possible

# Important for the Selection of Special Channels with non-direct indicating Colour TVs and VCRs with Frequency Synthesizer and Cable Tuner

All German-speaking transmitters (Federal Republic of Germany, Austria) are directly indicated with their channel numbers. Exceptions may exist for transmitters which are converted into other frequency ranges by converters (e.g. reception by cable). The table given below shows the allocation of the channel numbers to the special channels of public cable television systems:

| Channel No. Indication | Special Channel | Vision Carrier Frequency (MHz) | Band         |
|------------------------|-----------------|--------------------------------|--------------|
| 81                     | S 1             | 105,25                         |              |
| 82                     | S 2             | 112,25                         |              |
| 83                     | S 3             | 119,25                         |              |
| 84                     | S 4             | 126,25                         | Lower        |
| 85                     | S 5             | 133,25                         | Special      |
| 86                     | S 6             | 140,25                         | Channel      |
| 87                     | S 7             | 147,25                         | Band         |
| 88                     | S 8             | 154,25                         | "USB"        |
| 89                     | S 9             | 161,25                         |              |
| 90                     | S 10            | 168,25                         |              |
| 91                     | S 11            | 231,25                         |              |
| 92                     | S 12            | 238,25                         |              |
| 93                     | S 13            | 245,25                         |              |
| 94                     | S 14            | 252,25                         | Upper        |
| 95                     | S 15            | 259,25                         | Special      |
| 96                     | S 16            | 266,25                         | Channel      |
| 97                     | S 17            | 273,25                         | Band         |
| 98                     | S 18            | 280,25                         | "OSB"        |
| 99                     | S 19            | 287,25                         |              |
| 00                     | S 20            | 294,25                         |              |
| 74                     |                 | 69,25                          |              |
| 75                     |                 | 76,25                          | Special      |
| 76                     |                 | 83,25                          | Channel Band |
| 77                     |                 | 90,25                          | Belgium      |
| 78                     |                 | 97,25                          |              |
| 79                     |                 | 59,25                          | OIRT         |
| 80                     |                 | 93,25                          | Channels     |

TV

2.10 Grundig Service

#### TV

## **Hyperband in Germany**

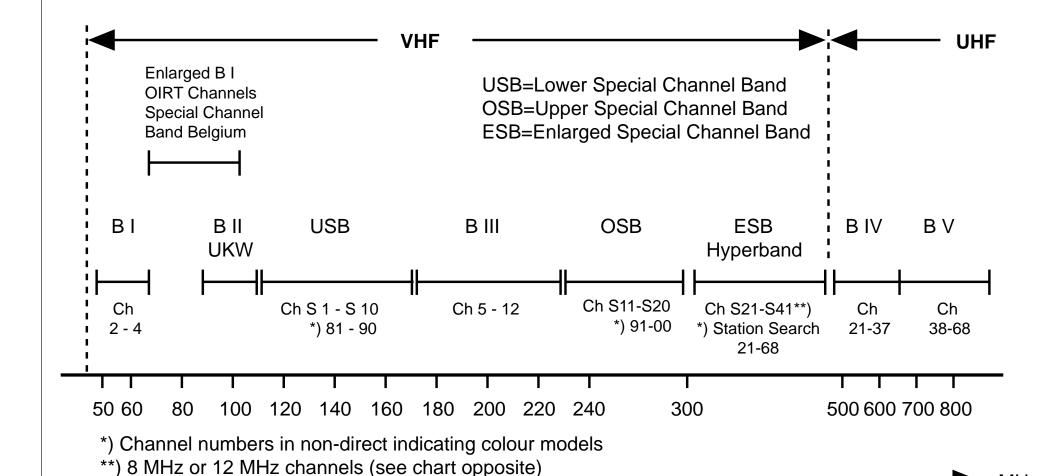
GRUNDIG television receivers fitted with the tuner 29504-101.01/.06 can receive the Hyperband channels S21 - S25 only by means of a hyperband converter. This converter can be obtained from: Elektronic Thoma GmbH, Friedhofweg 5, D-91599 Dentlein phone ++49 9855/9777-0, fax ++49 9855/977720

|                 | 8 MHz Ch | annals              | 12 MHz Channels |                      |
|-----------------|----------|---------------------|-----------------|----------------------|
| Special Channel |          | Sound Carrier (MHz) |                 | Band                 |
| \$ 21           | 303,25   | 308,75              | 303,25          | 24.14                |
| S 22            | 311,25   | 316,75              | 315,25          |                      |
| S 23            | 319,25   | 324,75              | 327,25          |                      |
| S 24            | 327,25   | 332,75              | 339,25          |                      |
| S 25            | 335,25   | 340,75              | 351,25          |                      |
| S 26            | 343,25   | 348,75              | 363,25          |                      |
| S 27            | 351,25   | 356,75              | 375,25          |                      |
| S 28            | 359,25   | 364,75              | 387,25          | Extended             |
| S 29            | 367,25   | 372,75              | 399,25          | Special Channel Band |
| S 30            | 375,25   | 380,75              | 411,25          | "ESB"                |
| S 31            | 383,25   | 388,75              | 423,25          |                      |
| S 32            | 391,25   | 396,75              | 435,25          |                      |
| S 33            | 399,25   | 404,75              | 447,25          |                      |
| S 34            | 407,25   | 412,75              | 459,25          |                      |
| S 35            | 415,25   | 420,75              |                 |                      |
| S 36            | 423,25   | 428,75              |                 |                      |
| S 37            | 431,25   | 436,75              |                 |                      |
| S 38            | 439,25   | 444,75              |                 |                      |
| S 39            | 447,25   | 452,75              |                 |                      |
| S 40            | 455,25   | 460,75              |                 |                      |
| S 41            | 463,25   | 468,75              |                 |                      |

Subject to alteration!

Grundig Service

MHz



## **Chassis Chart of TV Receivers**

Models produced from 1993/94 to 1997/98

in alphabetical order

| TV Model   | Chassis                                 | Tele-Pilot®      | Module<br>Chart |
|--|---|------------------|-----------------|
| E 55-700 TOP/LOG TV-Max                                    | CUC 6450 (Stereo)                       | TP 720           | page 2.27       |
| E 55-700/9 TOP/LOG TV-Max                                  | CUC 6450 (Stereo)                       | TP 720           | 2.27            |
| E 63-911 IDTV  | CUC1852 (digi 5)                        | TP 760           | 2.23            |
| E 72-170 IDTV Elegance                                     | CUC 1822 (digi 5)                       | TP 770           | 2.29            |
| E 72-911 DPL   | CUC 7861 (Stereo)                       | TP 760           | 2.25            |
| E 72-911 DPL/IDTV  | CUC 1861 (digi 5)                       | TP 770           | 2.29            |
| E 72-911 IDTV  | CUC1852 (digi 5)                        | TP 760           | 2.25            |
| E 72-911 TOP   | CUC 7851 (Stereo)                       | TP 760           | 2.20/.21        |
| M 169-92 IDTV  | CUC 1891 (16:9)                         | TP 661 TOP       | 2.20/.21        |
| M 45-775 TOP   | CUC 5350 (Stereo)                       | TP 720           | 2.19            |
| M 50-775 TOP   | CUC 5350 (Stereo)                       | TP 720           | 2.19            |
| M 55-105 IDTV  | CUC 1800 (digi 5)                       | TP 760           | 2.23            |
| M 55-105/9 IDTV  | CUC 1800 (digi 5)                       | TP 760           | 2.23            |
| M 55-280/8 IDTV/LOG  | CUC 1805 (Basic)                        | TP 800           | 2.34            |
| M 55-775 TOP   | CUC 5360 (Stereo)                       | TP 720           | 2.19            |
| M 55-775/8 TOP   | CUC 5360 (Stereo)                       | TP 720           | 2.19            |
| M 61-1690 DPL  | CUC 6469 (Stereo)                       | TP 720           | 2.27            |
| M 61-1690 TOP/LOG  | CUC 6369 (Stereo)                       | TP 760           | 2.30            |
| M 63-105 IDTV  | CUC1822 (digi 5)                        | TP 760           | 2.23            |
| M 63-105/9 IDTV  | CUC1822 (digi 5)                        | TP 760           | 2.23            |
| M 63-115/9 IDTV  | CUC 1822 (digi 5)                       | TP 770           | 2.28            |
| M 63-280 IDTV/LOG  | CUC 1825 (Basic)                        | TP 800           | 2.30            |
| M 63-280/8 IDTV/LOG  | CUC 1825 (Basic)                        | TP 800           | 2.30            |
| M 63-281 IDTV/LOG  | CUC 1826 (Basic+)                       | TP 800           | 2.34            |
| M 63-281/8 IDTV/LOG  | CUC 1826 (Basic+)                       | TP 800           | 2.34            |
| M 63-775 TOP   | CUC 5365 (Stereo)                       | TP 760           | 2.19            |
| M 63-775/8 TOP   | CUC 5365 (Stereo)                       | TP 760           | 2.19            |
| M 63-776/9 TOP   | CUC 6365 (Stereo)                       | TP 720           | 2.28            |
| M 63-795/9 TOP   | CUC 7820 (Stereo)                       | TP 760           | 2.23            |
| M 70-169/9 IDTV  | CUC 1951 (digi 5)                       | TP 760           | 2.28            |
| M 70-1690 DPL/IDTV   | CUC 1961 (digi 5)                       | TP 770           | 2.28            |
| M 70-1690 DPL/IDTV/LOG                                     | CUC 1961 (digi 5)                       | TP 770           | 2.31            |
| M 70-1690 TOP/LOG  | CUC 6369 (Stereo)                       | TP 760           | 2.31            |
| M 70-269 PALplus/LOG                                       | CUC 1962 (digi 6)                       | TP 800           | 2.31            |
| M 70-269/9 Referenz  | CUC 1952 (digi 6)                       | TP 800           | 2.32/.33        |
| M 70-280 IDTV/LOG  | CUC 1825 (Basic)                        | TP 800           | 2.31            |
| M 70-280/8 IDTV/LOG  | CUC 1825 (Basic)                        | TP 800           | 2.31            |
| M 70-281 IDTV/LOG  | CUC 1826 (Basic+)                       | TP 800           | 2.35            |
| M 70-281/8 IDTV/LOG  | CUC 1826 (Basic+)                       | TP 800           | 2.35            |
| M 72-100   | CUC 1826 (Basic+)                       | TP 800           | 2.35            |
| M 72-100/8   | CUC 1826 (Basic+)                       | TP 800           | 2.35            |
| M 72-105 IDTV  | CUC 1852 (digi 5)                       | TP 760           | 2.20/.21        |
| M 72-105/9 IDTV  | CUC 1852 (digi 5)<br>CUC1852 (digi 5)   | TP 760<br>TP 760 | 2.20/.21        |
| M 72-105/9 IDTV/PIP  | CUC 1852 (digi 5)                       |                  | 2.25            |
| M 72-115 IDTV<br>M 72-215 IDTV/Referenz                    | ` ` ` '                                 | TP 770           | 2.29            |
|  | CUC 1852 (digi 5+)                      | TP 770           | 2.29            |
| M 72-215/9 IDTV/PIP/Referenz<br>M 72-270 IDTV/LOG Elegance | CUC 1852 (digi 5+)<br>CUC 1826 (Basic+) | TP 770<br>TP 800 | 2.29<br>2.35    |
| M 72-315 IDTV/Referenz                                     | CUC 1828 (Basic+)                       | TP 771           | 2.31            |
| M 72-315 IDT V/Referenz                                    | CUC 1852 (digi 5+)                      | TP 771           | 2.31            |
| M 72-410 Reference   | CUC 1852 (digi 5+)                      | TP 800           | 2.31            |
| M 72-410 Reference/PIP                                     | CUC 1842 (digi 6)                       | TP 800           | 2.35            |
| M 72-410 Reference   | CUC 1842 (digi 6)                       | TP 800           | 2.35            |
| M 72-795 TOP   | CUC 7851 (Stereo)                       | TP 760           | 2.20/.21        |
| M 72-795 TOP<br>M 72-795/9 TOP                             | CUC 7851 (Stereo)                       | TP 760           | 2.20/.21        |
| M 82-105/9 IDTV  | CUC 1881 (digi 4)                       | TP 760           | 2.20/.21        |
| M 82-105/9 IDTV/PIP  | CUC 1882 (digi 5)                       | TP 760           | 2.25            |
| M 82-115/9 IDTV/PIP  | CUC 1882 (digi 5)                       | TP 770           | 2.29            |
| M 82-169 a PALplus   | CUC 1981 (digi 4)                       | TP 760           | 2.32/.33        |
| M 82-169 PAL PLUS  | CUC 1981 (digi 4)                       | TP 760           | 2.327.33        |
| M 82-169/9 IDTV  | CUC 1982 (digi 5)                       | TP 760           | 2.29            |

| TV Model                              | Chassis                                | Tele-Pilot®              | Module<br>Chart<br>page |
|---------------------------------------|--|--------------------------|-------------------------|
| M 82-1690/9 TOP/LOG                   | CUC 6368 (Stereo)                      | TP 760                   | 2.32/.33                |
| M 82-269 PALplus/LOG                  | CUC 1983 (digi 6)                      | TP 800                   | 2.32/.33                |
| M 82-269/9 Reference                  | CUC 1984 (digi 6)                      | TP 800                   | 2.32/.33                |
| M 82-795 TOP                          | CUC 7880 (Stereo)                      | TP 760                   | 2.20/.21                |
| M 82-795/9 PIP/TOP                    | CUC 7880 (Stereo)                      | TP 760                   | 2.20/.21                |
| M 84-410/8 IDTV/LOG                   | CUC 1827 (Basic+)                      | TP 800                   | 2.32/.33                |
| M 95-105/9 IDTV                       | CUC 1892 (digi 4)                      | TP 760                   | 2.22                    |
| M 95-105/9 IDTV/PIP                   | CUC 1893 (digi 5)                      | TP 760                   | 2.25                    |
| M 95-115/9 IDTV/PIP                   | CUC 1893 (digi 5)                      | TP 770                   | 2.29                    |
| M 95-410/9 a Reference/PIP            | CUC 1894 (digi 6)                      | TP 800                   | 2.35                    |
| M 95-410/90 Referenz                  | CUC 1894 (digi 6)                      | TP 800                   | 2.32/.33                |
| M 95-795/9 PIP/TOP                    | CUC 7890 (Stereo)                      | TP 760                   | 2.22                    |
| MW 70-100/8                           | CUC 1828 (Basic++)                     | TP 800                   | 2.35                    |
| MW 70-269 PAL PLUS                    | CUC 1952 (digi 6)                      | TP 800                   | 2.35                    |
| MW 82-100/9                           | CUC 1984 (digi 6)                      | TP 800                   | 2.35                    |
| MW 82-100/9 PAL PLUS                  | CUC 1983 (digi 6)                      | TP 800                   | 2.35                    |
| MW 82-2690 NIC/TOP                    | CUC 2058N (Stereo)                     | TP 800                   | 2.35                    |
| P 37-060                              | CUC 6300 (Mono)                        | TP 610                   | 2.19                    |
| P 37-065                              | G 1000                                 | TRC 1                    | 2.27                    |
| P 37-065/5                            | CUC 7301 (Mono)                        | TP 711                   | 2.30                    |
| P 37-070                              | CUC 7301 (Mono)                        | TP 711                   | 2.27                    |
| P 37-071                              | CUC 7303 (Mono)                        | TP 711                   | 2.30                    |
| P 37-640 text                         | CUC 6300 (Mono)                        | TP 720                   | 2.19                    |
| P 37-730 text                         | CUC 7301 (Mono)                        | TP 711                   | 2.27                    |
| P 37-731 text                         | CUC 7303 (Mono)                        | TP 711<br>TP 711         | 2.30                    |
| P 37-731/12 text<br>P 37-732/5 text   | CUC 7305 (Mono)<br>CUC 7303 (Mono)     | TP 711                   | 2.34                    |
| P 37-740 SAT                          | CUC 7303 (Mono)                        | TP 720                   | 2.23                    |
| P 37-740 SAT                          | CUC 7300 (Mono)                        | TP 720                   | 2.23                    |
| P 37-843 FR                           | CUC 7301 F (Mono)                      | TP 711                   | 2.27                    |
| P 37-845                              | CUC 7300 F (Mono)                      | TP 720                   | 2.27                    |
| P 37-845 FR/SAT                       | CUC 7300 F (Mono)                      | TP 720                   | 2.27                    |
| P 3770 text                           | G 1000                                 | TRC 1                    | 2.27                    |
| P 40-060                              | CUC 6300 (Mono)                        | TP 710                   | 2.19                    |
| P 40-64 FR/FM/CL                      | CUC 6301 F (Mono)                      | TP FM/CL                 | 2.27                    |
| P 40-64/4 FM/CL                       | CUC 6301 (Mono)                        | TP FM/CL                 | 2.27                    |
| P 40-640 text                         | CUC 6300 (Mono)                        | TP 720                   | 2.19                    |
| P 40-740 TOP                          | CUC 7300 (Mono)                        | TP 720                   | 2.23                    |
| P 42-060                              | CUC 6300 (Mono)                        | TP 710                   | 2.19                    |
| P 45-640 text                         | CUC 6300 (Mono)                        | TP 720                   | 2.19                    |
| P 45-731 text                         | CUC 7303 (Mono)                        | TP 711                   | 2.30                    |
| P 45-740 TOP                          | CUC 7300 (Mono)                        | TP 720                   | 2.23                    |
| P 45-845 FR                           | CUC 7300 F (Mono)                      | TP 720                   | 2.27                    |
| P 50-640 text                         | CUC 6300 (Mono)                        | TP 720                   | 2.19                    |
| ST 55-750 text                        | CUC 7350 (Stereo)                      | TP 720                   | 2.27                    |
| ST 55-750/9 text                      | CUC 7350 (Stereo)                      | TP 720                   | 2.27                    |
| ST 55-800 a text                      | CUC 2020 (Stereo)                      | TP 715                   | 2.34                    |
| ST 55-800 NIC/TOP                     | CUC 2020N (Stereo)                     | TP 715                   | 2.34                    |
| ST 55-800 text                        | CUC 7350 (Stereo)                      | TP 712                   | 2.34                    |
| ST 55-800/9 text                      | CUC 7350 (Stereo)                      | TP 712                   | 2.34                    |
| ST 55-876/9 text                      | CUC 7350 (Stereo)                      | TP 720                   | 2.30                    |
| ST 55-95 ECO                          | CUC 7350 (Stereo)                      | TP 712                   | 2.30                    |
| ST 63-160 a IDTV                      | CUC 1822 (digi 5)                      | TP 760                   | 2.30                    |
| ST 63-160 IDTV                        | CUC 1822 (digi 5)                      | TP 760                   | 2.23                    |
| ST 63-255 IDTV/LOG                    | CUC 1825 (Basic)                       | TP 771                   | 2.30                    |
| ST 63-255/8 IDTV/LOG                  | CUC 1825 (Basic)                       | TP 771                   | 2.30                    |
| ST 63-651/9 TOP<br>ST 63-671 text     | CUC 6360 (Stereo)<br>CUC 5361 (Stereo) | TP 720<br>TP 720         | 2.23                    |
| ST 63-700 FR/TOP                      | CUC 5361 (Stereo)                      |                          | 2.19                    |
| ST 63-700 FR/TOP<br>ST 63-700 NIC/TOP | CUC 2030F (Stereo)                     | TP 713/715<br>TP 713/715 | 2.34                    |
| ST 63-700 NIC/TOP                     | CUC 2030 (Stereo)                      | TP 713/715               | 2.34                    |
| ST 63-700 text<br>ST 63-720/8 text    | CUC 2030 (Stereo)                      | TP 711                   | 2.34                    |
| ST 63-725/8 text                      | CUC 6330 (Stereo)                      | TP 712                   | 2.30                    |
|                                       |  |                          |                         |
| ST 63-750 text                        | CUC 6330 (Stereo)                      | TP 720                   | 2.28                    |

2.14 Grundig Service

| TV Model                               | Chassis                                | Tele-Pilot®      | Module<br>Chart<br>page |
|--|--|------------------|-------------------------|
| ST 63-750/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.28                    |
| ST 63-755 TOP                          | CUC 6360 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-755/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-760 TOP                          | CUC 5365 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-760/8 TOP                        | CUC 5365 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-760/9 DPL                        | CUC 7861 (Stereo)                      | TP 760           | 2.23                    |
| ST 63-761 TOP                          | CUC 6365 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-761/9 TOP                        | CUC 6365 (Stereo)                      | TP 720           | 2.23                    |
| ST 63-780 NIC/TOP                      | CUC 2030N (Stereo)                     | TP 715           | 2.34                    |
| ST 63-780 text                         | CUC 2030 (Stereo)                      | TP 713/715       | 2.34                    |
| ST 63-781 IDTV                         | CUC1823 (digi 5)                       | TP 760           | 2.23                    |
| ST 63-800 TOP/LOG                      | CUC 6360 (Stereo)                      | TP 720           | 2.30                    |
| ST 63-800/9 TOP/LOG                    | CUC 6360 (Stereo)                      | TP 720           | 2.30                    |
| ST 70-100 IDTV                         | CUC 1824 (digi 5)                      | TP 760           | 2.28                    |
| ST 70-150 IDTV                         | CUC 1824 (digi 5)                      | TP 760           | 2.28                    |
| ST 70-155 IDTV                         | CUC 1824 (digi 5)                      | TP 760           | 2.24                    |
| ST 70-155/9 IDTV                       | CUC 1824 (digi 5)                      | TP 760           | 2.24                    |
| ST 70-160 IDTV                         | CUC 1824 (digi 5)                      | TP 760           | 2.28                    |
| ST 70-160/9 IDTV<br>ST 70-169 TOP      | CUC 1824 (digi 5)<br>CUC 7951 (Stereo) | TP 760<br>TP 760 | 2.28                    |
| ST 70-169 TOP<br>ST 70-169/9 TOP       | CUC 7951 (Stereo)                      | TP 760           | 2.19                    |
| ST 70-169/9 1OP<br>ST 70-255 IDTV/LOG  | CUC 1825 (Basic)                       | TP 771           | 2.19                    |
| ST 70-255/8 IDTV/LOG                   | CUC 1825 (Basic)                       | TP 771           | 2.30                    |
| ST 70-233/6 IDTV/LOG<br>ST 70-270 IDTV | CUC 1825 (Basic)                       | TP 800           | 2.34                    |
| ST 70-270 IDTV<br>ST 70-270/8 IDTV     | CUC 1825 (Basic)                       | TP 800           | 2.34                    |
| ST 70-270/8 IDTV<br>ST 70-650/8 text   | CUC 5360 (Stereo)                      | TP 720           | 2.20/.21                |
| ST 70-651/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-655/8 text                       | CUC 5360 (Stereo)                      | TP 720           | 2.20/.21                |
| ST 70-665 text                         | CUC 5360 (Stereo)                      | TP 720           | 2.20/.21                |
| ST 70-675 TOP                          | CUC 5361 (Stereo)                      | TP 663           | 2.24                    |
| ST 70-700 DPL/NIC/FT                   | CUC 2040N (Stereo)                     | TP 715           | 2.34                    |
| ST 70-700 FR/TOP                       | CUC 2030F (Stereo)                     | TP 713/715       | 2.34                    |
| ST 70-700 NIC/TOP                      | CUC 2030N (Stereo)                     | TP 713/715       | 2.34                    |
| ST 70-700 text                         | CUC 2030 (Stereo)                      | TP 713/715       | 2.34                    |
| ST 70-705 TOP                          | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-705/8 text                       | CUC 6330 (Stereo)                      | TP 712           | 2.30                    |
| ST 70-705/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-705/9 TOP/LOG                    | CUC 6360 (Stereo)                      | TP 720           | 2.30                    |
| ST 70-720/8 text                       | CUC 6330 (Stereo)                      | TP 712           | 2.30                    |
| ST 70-725/8 text                       | CUC 6330 (Stereo)                      | TP 712           | 2.31                    |
| ST 70-728 text                         | CUC 6330 (Stereo)                      | TP 712           | 2.31                    |
| ST 70-745 text                         | CUC 6330 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-750 text                         | CUC 6330 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-750/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-755 SAT                          | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-755 TOP                          | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-755 TOP/LOG                      | CUC 6360 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-755/9 DPL                        | CUC 6460 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-755/9 DPL/LOG                    | CUC 6460 (Stereo)                      | TP 720           | 2.31                    |
| ST 70-755/9 TOP                        | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-755/9 TOP/LOG                    | CUC 6360 (Stereo)                      | TP 720           | 2.28                    |
| ST 70-760 TOP/LOG                      | CUC 6361 (Stereo)                      | TP 720           | 2.31                    |
| ST 70-770 text                         | CUC 6330 (Stereo)                      | TP 712           | 2.34                    |
| ST 70-778 text                         | CUC 6330 (Stereo)                      | TP 712           | 2.34                    |
| ST 70-780 FR/TOP                       | CUC 2030F (Stereo)                     | TP 713/715       | 2.34                    |
| ST 70-780 NIC/TOP                      | CUC 2030N (Stereo)                     | TP 715           | 2.34                    |
| ST 70-780 text                         | CUC 2030 (Stereo)                      | TP 715           | 2.34                    |
| ST 70-800 TOP/LOG                      | CUC 6360 (Stereo)                      | TP 720           | 2.31                    |
| ST 70-800/9 TOP/LOG<br>ST 70-869 IDTV  | CUC 6360 (Stereo)                      | TP 720<br>TP 800 | 2.31                    |
| ST 70-869 IDTV<br>ST 70-907 text       | CUC 1825 (Basic)                       | TP 720           | 2.31                    |
| ST 70-907 text<br>ST 70-93 text        | CUC 5360 (Stereo)                      | TP 720           | 2.24                    |
| ST 70-93 text<br>ST 70-94 text         | CUC 5360 (Stereo) CUC 5360 (Stereo)    | TP 720           | 2.24                    |
| ST 70-94 lext<br>ST 70-95 TOP          | CUC 6360 (Stereo)                      | TP 720           | 2.24                    |

| TV Model                          | Chassis            | Tele-Pilot®         | Module<br>Chart<br>page |
|-----------------------------------|--------------------|---------------------|-------------------------|
| ST 70-97 IDTV                     | CUC 1825 (Basic)   | TP 771              | 2.34                    |
| ST 7003                           | CUC 5360 (Stereo)  | TP 720              | 2.20/.21                |
| ST 7004                           | CUC 6360 (Stereo)  | TP 720              | 2.24                    |
| ST 7004/9                         | CUC 6360 (Stereo)  | TP 720              | 2.24                    |
| ST 72-160 IDTV                    | CUC 1822 (digi 5)  | TP 760              | 2.20/.21                |
| ST 72-160/9 IDTV                  | CUC 1822 (digi 5)  | TP 760              | 2.24                    |
| ST 72-161 IDTV                    | CUC 1822 (digi 5)  | TP 760              | 2.28                    |
| ST 72-161/9 IDTV                  | CUC 1822 (digi 5)  | TP 760              | 2.28                    |
| ST 72-261 IDTV/LOG                | CUC 1826 (Basic+)  | TP 800              | 2.31                    |
| ST 72-261/8 IDTV/LOG              | CUC 1826 (Basic+)  | TP 800              | 2.31                    |
| ST 72-760 MD/TOP                  | CUC 5365 (Stereo)  | TP 720              | 2.24                    |
| ST 72-760 text                    | CUC 6331 (Stereo)  | TP 720              | 2.32/.33                |
| ST 72-760 TOP                     | CUC 5365 (Stereo)  | TP 720              | 2.20/.21                |
| ST 72-760/8 text                  | CUC 6331 (Stereo)  | TP 720              | 2.32/.33                |
| ST 72-760/8 TOP                   | CUC 5365 (Stereo)  | TP 720              | 2.20/.21                |
| ST 72-760/9 DPL                   | CUC 7861 (Stereo)  | TP 760              | 2.24                    |
| ST 72-761 SAT                     | CUC 6365 (Stereo)  | TP 720              | 2.28                    |
| ST 72-761 TOP                     | CUC 6365 (Stereo)  | TP 720              | 2.24                    |
| ST 72-761 1OF<br>ST 72-761/9 TOP  | CUC 6365 (Stereo)  | TP 720              | 2.24                    |
| ST 72-761/9 TOP                   | CUC 6365 (Stereo)  | TP 720              | 2.24                    |
| ST 72-762 TOP<br>ST 72-762/9 TOP  | CUC 6365 (Stereo)  | TP 720              | 2.28                    |
| ST 72-764 MD/SAT                  | CUC 7820 (Stereo)  | TP 720              | 2.25                    |
| ST 72-764 MID/SAT                 | CUC 7820 (Stereo)  | TP 720              | 2.20/.21                |
| ST 72-764 SAT<br>ST 72-860 FR/TOP | CUC 2031F (Stereo) | TP 800/715          | 2.207.21                |
|                                   |                    |                     |                         |
| ST 72-860 NIC/TOP                 | CUC 2031N (Stereo) | TP 800              | 2.35                    |
| ST 72-860 TOP                     | CUC 2031 (Stereo)  | TP 800              | 2.35                    |
| ST 72-865 NIC/TOP                 | CUC 2031N (Stereo) | TP 800              | 2.35                    |
| ST 8277 TOP                       | CUC 7880 (Stereo)  | RC 760              | 2.20/.21                |
| ST 84-796/9 TOP/LOG               | CUC 6380 (Stereo)  | TP 720              | 2.29                    |
| STEELER                           | CUC 6300 (Mono)    | TP 720/ TP 760 HiFi | 2.22                    |
| T 51-060                          | CUC 6300 (Mono)    | TP 710              | 2.19                    |
| T 51-070                          | CUC 7301 (Mono)    | TP 711              | 2.30                    |
| T 51-071                          | CUC 7303 (Mono)    | TP 711              | 2.34                    |
| T 51-640 text                     | CUC 6300 (Mono)    | TP 720              | 2.19                    |
| T 51-711 text                     | CUC 7301 (Mono)    | TP 711              | 2.27                    |
| T 51-730 text                     | CUC 7301 (Mono)    | TP 711              | 2.27                    |
| T 51-730/5 text                   | CUC 7301 (Mono)    | TP 711              | 2.27                    |
| T 51-731 text                     | CUC 7303 (Mono)    | TP 711              | 2.30                    |
| T 51-732/5 text                   | CUC 7303 (Mono)    | TP 711              | 2.30                    |
| T 55-060                          | CUC 6300 (Mono)    | TP 710              | 2.19                    |
| T 55-64 FR/FM/CL                  | CUC 6301 F (Mono)  | TP FM/CL            | 2.27                    |
| T 55-64/4 FM/CL                   | CUC 6301 (Mono)    | TP FM/CL            | 2.27                    |
| T 55-640 text                     | CUC 6300 (Mono)    | TP 720              | 2.19                    |
| T 55-645 text                     | G 1000             | TRC 1               | 2.27                    |
| T 55-730 text                     | CUC 7301 (Mono)    | TP 711              | 2.27                    |
| T 55-730/5 text                   | CUC 7301 (Mono)    | TP 711              | 2.27                    |
| T 55-731 text                     | CUC 7303 (Mono)    | TP 711              | 2.30                    |
| T 55-732/5 text                   | CUC 7303 (Mono)    | TP 711              | 2.30                    |
| T 55-740 SAT                      | CUC 7300 (Mono)    | TP 720              | 2.23                    |
| T 55-740 TOP                      | CUC 7300 (Mono)    | TP 720              | 2.23                    |
| T 55-843 FR                       | CUC 7301 F (Mono)  | TP 711              | 2.30                    |
| T 55-845 FR                       | CUC 7300 F (Mono)  | TP 720              | 2.27                    |
| T 5570 text                       | G 1000             | TRC 1               | 2.27                    |
| T 63-640 a text                   | CUC 6310 (Mono)    | TP 720              | 2.19                    |
| T 70-640 a text                   | CUC 6310 (Mono)    | TP 720              | 2.19                    |
| T 70-740 text                     | CUC 6310 (Mono)    | TP 720              | 2.28                    |
| T 70-740/4 TOP                    | CUC 6310 (Mono)    | TP 720              | 2.28                    |
| T 70-843 FR                       | CUC 6310 F (Mono)  | TP 720              | 2.31                    |
| TVR 3701 SV                       | 1 Tuner (Mono)     | TVP 762             |                         |
| TVR 3705                          | 1 Tuner (Mono)     | TVP 763             |                         |
| TVR 3710                          | 1 Tuner (Mono)     | TVP 762             |                         |
| TVR 3720                          | 2 Tuner (Mono)     | TVP 763             |                         |
| TVR 5100                          | 1 Tuner (Mono)     | TVP 762/763         |                         |
| TVR 5500                          | 2 Tuner (Mono)     | TVP 762/860         |                         |

2.16 Grundig Service

XC 701

XS 55

XS 55/1

XS 55/8

XS 55/9

XS 63/1

XS 63/2

XS 63/8

XS 63/81

XS 63/9

XS 70/1

XS 70/8

XS 70/81

XS 70/9

Grundig Service

XS 63

TV Model

Module

Chart page

2.22

2.22

2.29

2.22

2.29

2.22

2.26

2.29

2.22

2.32/.33

2.26

2.26

2.22

2.32/.33

2.26

Tele-Pilot®

TP 720

TP 720 TP 720

TP 712

TP 720

TP 720

TP 720

TP 712

TP 720

Chassis

CUC 5360 (Stereo)

CUC 5350 (Stereo)

CUC 7350 (Stereo)

CUC 5350 (Stereo)

CUC 7350 (Stereo) CUC 5360 (Stereo)

CUC 6360 (Stereo)

CUC 6330 (Stereo)

CUC 5360 (Stereo)

CUC 6330 (Stereo)

CUC 6360 (Stereo)

CUC 6360 (Stereo)

CUC 5360 (Stereo)

CUC 6330 (Stereo)

CUC 6360 (Stereo)

| F | ١ | į |  |
|---|---|---|--|

2.17

# Chassis Chart of City-Line/Super Elite TV Receivers Models produced from 1993/94 to 1997/98

| TV Model   | Chassis                                | Tele-Pilot®      | Module<br>Chart |
|--|--|------------------|-----------------|
| Athen T 1655 text  | CUC 6300 (Mono)                        | TP 720           | 2.22            |
| Athen T 755 TOP  | CUC 7300 (Stereo)                      | TP 720           | 2.26            |
| Atlanta 72 IDTV ST 172 IDTV                                | CUC 1822 (digi 5)                      | TP 760           | 2.22            |
| Atlanta 72/9 IDTV ST 172/9                                 | CUC 1822 (digi 5)                      | TP 760           | 2.26            |
| Atlanta SE 7220 a IDTV/LOG                                 | CUC 1830 (Basic++)                     | TP 900           | 2.36            |
| Atlanta SE 7220 IDTV/LOG                                   | CUC 1826 (Basic+)                      | TP 900           | 2.36            |
| Atlanta SE 7289 IDTV/LOG                                   | CUC 1826 (Basic+)                      | TP 900           | 2.32/.33        |
| Berlin SE 70-100/8   | CUC 1828 (Basic++)                     | TP 900           | 2.36            |
| Berlin SE 7290 IDTV/LOG                                    | CUC 1822 (digi 5)                      | TP 771           | 2.32/.33        |
| Boston SE 7090 IDTV/LOG                                    | CUC 1826 (Basic+)                      | TP 900           | 2.36            |
| Boston SE 7090/8 IDTV/LOG                                  | CUC 1826 (Basic+)                      | TP 900           | 2.36            |
| Boston ST 170 IDTV   | CUC 1824 (digi 5)                      | TP 760           | 2.29            |
| Boston ST 270 IDTV/LOG                                     | CUC 1825 (Basic)                       | TP 900           | 2.32/.33        |
| Boston ST 270/8 IDTV/LOG                                   | CUC 1825 (Basic)                       | TP 900           | 2.32/.33        |
| Copenhagen ST 1663 text                                    | CUC 5360 (Stereo)                      | TP 720           | 2.22            |
| Copenhagen ST 1663/8 text                                  | CUC 5360 (Stereo)                      | TP 720           | 2.22            |
| Copenhagen ST 763 TOP                                      | CUC 6360 (Stereo)                      | TP 720           | 2.26            |
| Copenhagen ST 763 TOP/LOG                                  | CUC 6360 (Stereo)                      | TP 720           | 2.32/.33        |
| Copenhagen ST 763/9 TOP                                    | CUC 6360 (Stereo)                      | TP 720           | 2.26            |
| Denver SE 82-100 PAL PLUS                                  | CUC 1984 (digi 6)                      | TP 900           | 2.36            |
| Denver SE 8216/9 PAL PLUS<br>Denver SE 8216/9 PIP Referenz | CUC 1984 (digi 6)                      | TP 900           | 2.36            |
|  | CUC 1984 (digi 6)                      | TP 900<br>TP 720 | 2.32/.33        |
| Greenville 37 SP 737 text<br>Greenville 55 T 5574 TOP      | CUC 7350 (Stereo)<br>CUC 7300 (Mono)   | TP 720           | 2.29            |
| Greenville 33 1 3374 TOP                                   | CUC 6360 (Stereo)                      | TP 720           | 2.29            |
| Greenville 7031 1770 10P                                   | CUC 6380 (Stereo)                      | TP 900           | 2.32/.33        |
| Greenville 7002 text                                       | CUC 6330 (Stereo)                      | TP 900           | 2.32/.33        |
| Greenville 7003 NIC/TOP                                    | CUC 2030N (Stereo)                     | TP 900           | 2.36            |
| Greenville 7003 text                                       | CUC 2030 (Stereo)                      | TP 900           | 2.36            |
| Hamburg ST 770/9 TOP                                       | CUC 6360 (Stereo)                      | TP 720           | 2.29            |
| Helsinki P 642 text  | CUC 6300 (Mono)                        | TP 720           | 2.26            |
| issabon SE 5576 text                                       | CUC 7350 (Stereo)                      | TP 720           | 2.32/.33        |
| Melbourne SE 7210 NIC/TOP                                  | CUC 2031N (Stereo)                     | TP 900           | 2.36            |
| Melbourne SE 7210 TOP                                      | CUC 2031 (Stereo)                      | TP 900           | 2.36            |
| Salzburg ST 770 TOP  | CUC 6360 (Stereo)                      | TP 720           | 2.26            |
| SE 4264 text   | CUC 6300 (Mono)                        | TP 720           | 2.22            |
| SE 5564 text   | CUC 6300 (Mono)                        | TP 720           | 2.22            |
| SE 5574 TOP  | CUC 7300 (Mono)                        | TP 720           | 2.26            |
| SE 6367 text   | CUC 5360 (Stereo)                      | TP 720           | 2.22            |
| SE 6376 TOP  | CUC 6360 (Stereo)                      | TP 720           | 2.26            |
| SE 6376 TOP/LOG  | CUC 6360 (Stereo)                      | TP 720           | 2.32/.33        |
| SE 7075 text   | CUC 5361 (Stereo)                      | TP 720           | 2.22            |
| SE 7085 text   | CUC 5360 (Stereo)                      | TP 720           | 2.22            |
| SE 7087 TOP  | CUC 6360 (Stereo)<br>CUC 1824 (digi 5) | TP 720           | 2.26            |
| SE 7088 IDTV<br>SE 7089 IDTV/LOG                           | CUC 1824 (digi 5)                      | TP 760<br>TP 900 | 2.29 2.32/.33   |
| SE 7286 TOP  | CUC 1825 (Basic)<br>CUC 5365 (Stereo)  | TP 720           | 2.32/.33        |
| SE 7287 TOP  | CUC 6365 (Stereo)                      | TP 720           | 2.26            |
| SE 7288 IDTV   | CUC 1852 (digi 5)                      | TP 760           | 2.22            |
| SE 7288/9 IDTV   | CUC 1852 (digi 5)                      | TP 760           | 2.26            |
| Stockholm ST 2670 text                                     | CUC 5361 (Stereo)                      | TP 720           | 2.22            |
| Stockholm ST 3670 text                                     | CUC 5360 (Stereo)                      | TP 720           | 2.22            |
| Sydney 100 SE 7020 IDTV/LOG                                | CUC 1826 (Basic+)                      | TP 900           | 2.36            |
| Sydney 100/8 SE 7020/8 IDTV/LOG                            | CUC 1826 (Basic+)                      | TP 900           | 2.36            |
| Sydney 72 ST 1772 TOP                                      | CUC 6365 (Stereo)                      | TP 720           | 2.26            |
| Sydney 72 ST 1772/9 TOP                                    | CUC 6365 (Stereo)                      | TP 720           | 2.26            |
| Sydney 72 ST 772 TOP                                       | CUC 5365 (Stereo)                      | TP 720           | 2.22            |
| Sydney 72 ST 772/8 TOP                                     | CUC 5365 (Stereo)                      | TP 720           | 2.26            |
| Sydney ST 872/8 text                                       | CUC 6331 (Stereo)                      | TP 900           | 2.32/.33        |
| ivoli T 655 TOP  | CUC 5301 (Mono)                        | TP 623           | 2.26            |
| Trento SE 7016/9 PIP Referenz                              | CUC 1952 (digi 6)                      | TP 900           | 2.32/.33        |
| Trento SE 7026 PAL PLUS                                    | CUC 1952 (digi 6)                      | TP 900           | 2.36            |
| Wien 100 SE 6320 IDTV/LOG                                  | CUC 1826 (Basic+)                      | TP 900           | 2.36            |

#### T١

## Module Chart of 1993/1994 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | 37-060 | 37-640 text | 40-060 | 40-640 text | 42-060 | 45-640 text | M 45-775 TOP | 50-640 text | 50-775 TOP | 51-060 | 51-640 text | 55-060 | 55-640 text | 55-775 TOP | 55-775/8 TOP | 63-640 a text | ST 63-671 text | M 63-775 TOP | M 63-775/8 TOP | T 70-640 a text | ST 70-169 TOP | 70-169/9 TOP |
|----------------------------|------------------------|--------|-------------|--------|-------------|--------|-------------|--------------|-------------|------------|--------|-------------|--------|-------------|------------|--------------|---------------|----------------|--------------|----------------|-----------------|---------------|--------------|
|                            |                        | РЗ     | Р3          | Р4     | Ρ4          | Ρ4     | Р4          | ٧            | P 5         | M          | T 5    | T 5         | T 5    | T 5         | Μ          | Σ            | 9 L           | ST             | M            | Μe             | T 7             | ST            | ST           |
| Display                    | 29501-080.05           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| Keyboard Control           | 29501-080.01           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              | •             |                |              |                | •               |               |              |
| Keyboard Control           | 29501-080.27           |        |             |        | •           |        | •           |              | •           |            |        |             |        |             |            |              |               |                |              |                |                 |               |              |
| Keyboard Control           | 29501-080.35           |        |             |        |             |        |             | •            |             | •          |        |             |        |             |            |              |               |                |              |                |                 |               |              |
| Keyboard Control           | 29501-080.41           |        |             |        |             |        |             |              |             |            |        |             | •      | •           |            |              |               |                |              |                |                 |               |              |
| Keyboard Control           | 29501-080.44           |        |             |        |             | •      |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 |               |              |
| Keyboard Control           | 29501-080.49           |        |             |        |             |        |             |              |             |            |        |             |        |             | •          | •            |               |                |              |                |                 |               |              |
| Keyboard Control           | 29501-080.51           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                | •            | •              |                 |               |              |
| Keyboard Control           | 29501-074.88           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               | •              |              |                |                 |               |              |
| CRT Panel                  | 29305-022.01           |        |             |        |             |        |             | •            |             | •          |        |             |        |             |            |              |               |                |              |                |                 |               |              |
| CRT Panel                  | 29305-022.06           | •      | •           |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 |               |              |
| CRT Panel                  | 29305-022.07           |        |             | •      | •           | •      | •           |              | •           |            | •      | •           | •      | •           |            |              |               |                |              |                |                 |               |              |
| CRT Panel                  | 29305-022.21           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              | •             |                |              |                | •               |               |              |
| CRT Panel                  | 29305-022.25           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                | •            | •              |                 |               |              |
| CRT Panel                  | 29305-022.27           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| CRT Panel                  | 29305-022.42           |        |             |        |             |        |             |              |             |            |        |             |        |             | •          | •            |               |                |              |                |                 |               |              |
| CRT Panel                  | 29305-022.74           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               | •              |              |                |                 |               |              |
| EURO-AV Socket pcb         | 29304-060.32           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| Colour/RGB (PAL/CTI)       | 29504-105.49           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               | •              |              |                |                 |               |              |
| Colour/RGB (PAL/SECAM)     | 29504-105.54           |        |             |        |             |        |             | •            |             | •          |        |             |        |             | •          |              |               |                | •            |                |                 |               |              |
| Colour/RGB Multi           | 29504-165.54           |        |             |        |             |        |             |              |             |            |        |             |        |             |            | •            |               |                |              | •              |                 |               |              |
| Colour-Sync                | 29504-165.55           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| Formatting Module          | 29504-106.10           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| Cable Tuner                | 29504-101.22           |        |             |        |             |        |             | •            |             | •          |        |             |        |             | •          | •            |               | •              | •            | •              |                 | •             | •            |
| Cable Tuner                | 29504-201.01           | •      | •           | •      | •           | •      | •           |              | •           |            | •      | •           | •      | •           |            |              | •             |                |              |                | •               |               |              |
| AF-Stereo 100 W            | 29504-104.62           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             | •            |
| TP 710                     | 29622-059.09           | •      |             | •      |             | •      |             |              |             |            | •      |             | •      |             |            |              |               |                |              |                |                 |               |              |
| TP 720                     | 29622-059.06           |        | •           |        | •           |        | •           | •            | •           | •          |        | •           |        | •           | •          | •            | •             | •              |              |                | •               |               |              |
| TP 760                     | 29622-059.01           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                | •            | •              |                 | •             | •            |
| Teletext VT 5336           | 29504-108.76           |        |             |        |             |        |             |              |             |            |        |             |        |             |            | •            |               |                |              | •              |                 |               |              |
| Teletext VT 5336 VPS       | 29504-108.86           |        |             |        |             |        |             | •            |             | •          |        |             |        |             | •          |              |               |                | •            |                |                 |               |              |
| IF-Sync Stereo             | 29504-102.18           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               | •              |              |                |                 |               |              |
| IF-Stereo                  | 29504-102.20/.30       |        |             |        |             |        |             | •            |             | •          |        |             |        |             | •          |              |               |                | •            |                |                 |               |              |
| IF-Stereo                  | 29504-102.33           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 | •             |              |
| IF-Multi Stereo (CUC 7)    | 29504-162.43           |        |             |        |             |        |             |              |             |            |        |             |        |             |            |              |               |                |              |                |                 |               | •            |
| IF-Stereo (EURO-Multi 8)   | 29504-162.41           |        |             |        |             |        |             |              |             |            |        |             |        |             |            | •            |               |                |              | •              |                 |               |              |

## Module Chart of 1993/1994 Television Receivers

| Bezeichnung<br>Designation  | Sachnummer<br>Part No.       | ST 70-665 text | ST 70-655/8 text | ST 70-93 text | ST 7003 | ST 72-760 TOP | ST 72-760/8 TOP | ST 72-764 SAT | ST 72-160 IDTV | M 72-105 IDTV | M 72-105/9 IDTV | M 72-795 TOP | M 72-795/9 TOP | E 72-911 TOP | ST 8277 TOP | M 82-795 TOP | M 82-795/9 PIP/TOP | M 82-105/9 IDTV |
|-----------------------------|------------------------------|----------------|------------------|---------------|---------|---------------|-----------------|---------------|----------------|---------------|-----------------|--------------|----------------|--------------|-------------|--------------|--------------------|-----------------|
| Tuning Module               | 29504-103.52                 | - 0,           | 0,               | 0)            | 0,      | 0,            | 0,              | •             | 0,             | _             | _               | _            | _              | _            | 0,          | _            | _                  | _               |
| Tuning Module with Teletext | 29504-103.63                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Display                     | 29501-080.07                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             | •            |                    |                 |
| Display                     | 29501-080.25                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              | •           |              |                    |                 |
| Display                     | 29501-080.48                 |                |                  |               |         |               |                 |               |                |               |                 |              |                | •            |             |              |                    |                 |
| Display                     | 29501-074.90                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-080.17                 |                |                  |               | •       |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-080.29                 |                |                  |               |         |               |                 |               |                |               |                 | •            | •              |              |             |              |                    |                 |
| Keyboard Control            | 29501-080.30                 |                |                  |               |         |               |                 |               |                | •             | •               |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-080.39                 |                |                  |               |         | •             | •               |               |                |               |                 |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-080.45                 |                |                  |               |         |               |                 | •             |                |               |                 |              |                |              |             |              | П                  |                 |
| Keyboard Control            | 29501-080.50                 |                |                  |               |         |               |                 |               | •              |               |                 |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-074.68                 |                | •                |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Keyboard Control            | 29501-074.88                 | •              |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| CRT Panel                   | 29304-070.76                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    | •               |
| CRT Panel                   | 29305-022.25                 |                |                  |               |         | •             | •               |               |                |               |                 |              |                |              |             |              |                    |                 |
| CRT Panel                   | 29305-022.26                 |                |                  |               |         |               |                 | •             |                |               |                 | •            | •              | •            |             |              |                    |                 |
| CRT Panel                   | 29305-022.29                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              | •           | •            | •                  |                 |
| CRT Panel                   | 29305-022.31                 |                |                  |               |         |               |                 |               | •              | •             | •               |              |                |              |             |              |                    |                 |
| CRT Panel                   | 29305-022.42                 | •              | 1)               | •             | •       |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| CRT Panel                   | 29305-022.62                 |                | 1)               |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Socket pcb                  | 29304-060.32                 |                |                  |               |         |               |                 |               |                |               |                 |              |                | •            | •           | •            | •                  |                 |
| Socket pcb                  | 29304-060.33                 |                |                  |               |         |               |                 |               |                |               |                 | •            | •              |              |             |              |                    |                 |
| Socket pcb                  | 29304-060.93                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Socket pcb                  | 29305-160.01                 |                |                  |               |         |               |                 | •             |                |               |                 |              |                |              |             |              |                    |                 |
| Socket pcb                  | 29305-160.05                 |                |                  |               |         |               |                 |               |                | •             | •               |              |                |              |             |              |                    |                 |
| Socket pcb                  | 29305-160.06                 |                |                  |               | _       |               |                 |               | •              |               |                 |              |                |              |             |              |                    |                 |
| Colour/RGB (PAL/CTI)        | 29504-105.49                 | •              |                  | •             | •       |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Colour/RGB (PAL/SECAM)      | 29504-105.54                 |                |                  |               |         | •             |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Colour-Sync<br>Colour/RGB   | 29504-165.53                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Colour-Sync                 | 29504-165.54                 |                | •                |               |         |               | •               |               |                |               |                 |              |                |              |             |              |                    |                 |
| Colour-Sync                 | 29504-165.60                 |                |                  |               |         |               |                 |               |                |               |                 |              | •              | •            |             |              |                    |                 |
| Feature Box                 | 29504-165.61                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Feature Box                 | 29504-103.08<br>29504-103.32 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| Cable Tuner                 | 29504-103.32                 |                |                  |               |         | •             |                 |               | •              | •             |                 |              |                |              |             | •            |                    |                 |
| Cable Tuner                 | 29504-101.22                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| TV-SAT Tuner                | 29504-201.61                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    |                 |
| LNC-Power Supply            | 29304-201.01                 |                |                  |               |         |               |                 | •             |                |               |                 |              |                |              |             |              |                    |                 |
| AF-Stereo 100 W             | 29504-104.54                 |                |                  |               |         |               |                 |               |                |               |                 |              |                |              |             |              |                    | •               |
| AF-Stereo 2 x 25 W          | 29504-104.56                 |                |                  |               |         |               |                 | •             | •              |               |                 |              |                |              |             |              |                    |                 |
| AF-Stereo 100 W             | 29504-104.62                 |                |                  |               |         |               |                 |               |                | •             | •               | •            | •              |              | •           |              | •                  |                 |
| East/West                   | 29504-107.88                 |                |                  |               |         |               |                 |               | •              | •             | •               |              |                |              |             |              |                    |                 |

<sup>1)</sup> optionally fitted



#### TV

## Module Chart of 1993/1994 Television Receivers / cont'd

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | ST 70-665 text | ١. |   | ST 7003 | ST 72-760 TOP |   | - 1 | 72-16 | M 72-105 IDTV | 72-105/ | M 72-795 TOP | 72-795 | 72-911 | 8277 T | 82-795 TOP | 82-795/9 | M 82-105/9 IDTV |
|----------------------------|------------------------|----------------|----|---|---------|---------------|---|-----|-------|---------------|---------|--------------|--------|--------|--------|------------|----------|-----------------|
| PIP-Colour Multi           | 29504-165.93           |                |    |   |         |               |   |     |       |               |         |              |        |        |        |            | •        |                 |
| PIP-Tuner/IF               | 29504-101.51           |                |    |   |         |               |   |     |       |               |         |              |        |        |        |            | •        |                 |
| SAT Unit                   | 29504-106.21           |                |    |   |         |               |   | •   |       |               |         |              |        |        |        |            |          |                 |
| TP 720                     | 29622-059.06           | •              | •  | • | •       | •             | • | •   |       |               |         |              |        |        |        |            |          |                 |
| TP 760                     | 29622-059.01           |                |    |   |         |               |   |     | •     | •             | •       | •            | •      | •      | 1)     | •          | •        | •               |
| Video                      | 29504-165.63           |                |    |   |         |               |   |     | •     | •             | •       |              | _      |        |        |            |          |                 |
| Video                      | 29504-105.71           |                |    |   |         |               |   |     |       |               |         |              | •      |        |        |            |          | •               |
| Teletext VT 5336           | 29504-108.76           |                |    |   |         |               | • |     |       |               |         |              |        |        |        |            |          |                 |
| Teletext VT 5336 VPS       | 29504-108.86           |                |    |   |         | •             |   |     |       |               |         |              |        | •      |        |            |          |                 |
| Teletext digi 4 TOP        | 29504-108.80           |                |    |   |         |               |   |     |       |               |         |              |        |        |        |            |          | •               |
| IF-Sync-Stereo             | 29504-102.18           | •              |    | • | •       |               |   |     |       |               |         |              |        |        |        |            |          |                 |
| IF-Sync-Stereo             | 29504-102.20/.30       |                |    |   |         | •             |   |     |       |               |         |              |        |        |        |            |          |                 |
| IF-Stereo                  | 29504-102.33           |                |    |   |         |               |   | •   | •     | •             |         | •            |        |        | •      | •          |          |                 |
| IF-Stereo (EURO-Multi 8)   | 29504-162.41           |                | •  |   |         |               | • |     |       |               |         |              |        |        |        |            |          |                 |
| IF-Stereo (CUC 7)          | 29504-162.43           |                |    |   |         |               |   |     |       |               | •       |              | •      | •      |        |            | •        |                 |
| IF-Stereo (digi 4)         | 29504-162.44           |                |    |   |         |               |   |     |       |               |         |              |        |        |        |            |          |                 |

<sup>1)</sup> RC 760 29622-059.02

#### IV

## Module Chart of 1993/1994 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | M 95-795/9 PIP/TOP | M 95-105/9 IDTV | T 1655 text ATHEN | ST 1663 text COPENHAGEN | ST 1663/8 text COPENHAGEN | ST 2670 text STOCKHOLM | ST 3670 text STOCKHOLM | ST 772 TOP Sydney 72 | ST 172 IDTV Atlanta 72 IDTV | SE 4264 text | SE 5564 text | SE 6367 text | SE 7075 text | SE 7085 text | SE 7286 TOP | SE 7288 IDTV | STEELER | XS 55 | 8/29 SX | XS 63 | XS 63/8 | XS 70/8 | XC 701 |
|----------------------------|------------------------|--------------------|-----------------|-------------------|-------------------------|---------------------------|------------------------|------------------------|----------------------|-----------------------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|---------|-------|---------|-------|---------|---------|--------|
| Display                    | 29501-080.03           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         | •      |
| Display                    | 29501-080.07           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Display                    | 29501-074.90           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Keyboard Control           | 29501-080.17           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         | •     | •       | •     | •       | •       |        |
| Keyboard Control           | 29501-080.24           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              | •       |       |         |       |         |         |        |
| Keyboard Control           | 29501-080.44           |                    |                 |                   |                         |                           |                        |                        |                      |                             | •            |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Keyboard Control           | 29501-080.46           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         |         |        |
| Keyboard Control           | 29501-080.47           |                    |                 |                   |                         |                           |                        |                        | •                    |                             |              |              |              |              |              | •           |              |         |       |         |       |         |         |        |
| Keyboard Control           | 29501-074.66           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              | •            |              |              |             |              |         |       |         |       |         |         |        |
| Keyboard Control           | 29501-074.86           |                    |                 |                   | •                       | •                         |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| CRT Panel                  | 29304-070.77           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| CRT Panel                  | 29305-022.01           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         | •     | •       |       |         |         |        |
| CRT Panel                  | 29305-022.06           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              | •       |       |         |       |         |         |        |
| CRT Panel                  | 29305-022.07           |                    |                 | •                 |                         |                           |                        |                        |                      |                             | •            | •            |              |              |              |             |              |         |       |         |       |         |         |        |
| CRT Panel                  | 29305-022.24           |                    |                 |                   |                         |                           |                        |                        | •                    |                             |              |              |              |              |              | •           |              |         |       |         |       | П       | П       |        |
| CRT Panel                  | 29305-022.30           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| CRT Panel                  | 29305-022.37           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         | П       |        |
| CRT Panel                  | 29305-022.42           |                    |                 |                   | •                       | •                         |                        | •                      |                      |                             |              |              | •            |              | •            |             |              |         |       |         | •     | •       | •       |        |
| CRT Panel                  | 29305-022.43           |                    |                 |                   |                         |                           | •                      |                        |                      |                             |              |              |              | •            |              |             |              |         |       |         |       |         | П       |        |
| EURO-AV Socket pcb         | 29304-060.32           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| EURO-AV Socket pcb         | 29304-060.93           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         | П       |        |
| EURO-AV Socket pcb         | 29305-160.05           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         |         |        |
| Colour/RGB (PAL/CTI)       | 29504-105.49           |                    |                 |                   | •                       |                           | •                      | •                      |                      |                             |              |              | •            | •            | •            |             |              |         | •     |         | •     | $\neg$  | $\neg$  | •      |
| Colour/RGB (PAL/SECAM)     | 29504-105.54           |                    |                 |                   |                         |                           |                        |                        | •                    |                             |              |              |              |              |              | •           |              |         |       |         |       |         |         |        |
| Colour/RGB Multi           | 29504-165.54           |                    |                 |                   |                         | •                         |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       | •       |       | •       | •       |        |
| Colour-Sync.               | 29504-165.60           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Feature Box                | 29504-103.08           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Feature Box                | 29504-103.32           |                    | Ĭ               |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Velocity Modulation board  | 29305-108.03           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Cable Tuner                | 29504-101.22           | •                  | •               |                   | •                       |                           | •                      |                        | •                    |                             |              |              | •            |              | •            | •           |              |         | •     |         |       | •       | •       |        |
| Cable Tuner                | 29504-101.22           |                    |                 | •                 |                         |                           |                        |                        |                      | •                           |              | •            |              |              |              |             | •            | •       |       |         |       |         |         |        |
| AF-Stereo 2 x 25 W         | 29504-201.01           |                    |                 | _                 |                         |                           |                        |                        |                      | •                           |              | _            |              |              |              |             | •            |         |       |         |       |         |         |        |
| AF-Stereo 100 W            | 29504-104.54           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| East/West                  | 29504-107.89           |                    | _               |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         |         |        |
| PIP Colour Multi           | 29504-107.89           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| PIP Tuner/IF Multi         | 29504-101.51           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| TP 720                     | 29622-059.06           |                    |                 |                   |                         |                           | •                      | •                      |                      |                             |              |              | •            |              |              | •           |              |         |       |         |       |         |         |        |
|                            |                        |                    | •               | •                 |                         |                           |                        |                        |                      |                             |              | _            |              |              |              |             |              |         |       |         |       |         |         |        |
| TP 760                     | 29622-059.01           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Video                      | 29504-165.63           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         |         |        |
| Video                      | 29504-105.71           |                    | •               |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Teletext VT 5336 VPS       | 29504-108.86           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| Teletext digi 4 TOP        | 29504-108.80           |                    | •               |                   |                         |                           |                        | _                      |                      |                             |              |              |              |              | _            |             |              |         |       |         |       |         |         |        |
| IF-Sync Stereo             | 29504-102.18           |                    |                 |                   | •                       |                           | •                      | •                      |                      |                             |              |              | •            | •            | •            |             |              |         | •     |         | •     |         |         | •      |
| IF-Sync Stereo             | 29504-102.20/.30       |                    |                 |                   |                         |                           |                        |                        | •                    |                             |              |              |              |              |              | •           |              |         |       |         |       |         |         |        |
| IF-Stereo                  | 29504-102.33           |                    |                 |                   |                         |                           |                        |                        |                      | •                           |              |              |              |              |              |             | •            |         |       |         |       |         |         |        |
| IF-Stereo (EURO-Multi 8)   | 29504-162.41           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       | •       |       | •       |         |        |
| IF-Multi Stereo (CUC 7)    | 29504-162.43           | •                  |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |
| IF-Stereo Multi (digi 4)   | 29504-162.44           |                    |                 |                   |                         |                           |                        |                        |                      |                             |              |              |              |              |              |             |              |         |       |         |       |         |         |        |

2.22 Grundig Service

#### T∖

## Module Chart of 1994/1995 Television Receivers

| Bezeichnung<br>Designation             | Sachnummer<br>Part No.              | P 37-740 SAT | P 37-740 TOP | P 40-740 TOP | P 45-740 TOP | T 55-740 TOP | T 55-740 SAT | M 55-105 IDTV | M 55-105/9 IDTV | ST 63-160 IDTV | ST 63-651/9 TOP | ST 63-755 TOP | ST 63-755/9 TOP | ST 63-760 TOP | ST 63-760/8 TOP | ST 63-760/9 DPL | ST 63-761 TOP | ST 63-761/9 TOP | ST 63-781 IDTV | M 63-795/9 TOP | E 63-911 IDTV | M 63-105 IDTV | M 63-105/9 IDTV |
|--|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|-----------------|----------------|-----------------|---------------|-----------------|---------------|-----------------|-----------------|---------------|-----------------|----------------|----------------|---------------|---------------|-----------------|
| Tuning Module                          | 29504-103.57                        |              |              |              |              |              |              |               |                 | •              |                 |               |                 |               |                 | •               |               |                 | _              | •              |               |               | •               |
| Tuning Module                          | 29504-103.63<br>29504-103.71/.77 1) |              |              |              |              |              |              |               |                 |                |                 | •             | •               |               |                 |                 |               |                 | •              |                |               |               |                 |
| Tuning Module                          |                                     |              |              |              |              |              |              |               |                 |                |                 | •             | _               |               |                 |                 |               |                 |                |                |               |               |                 |
| Tuning Module<br>Display               | 29504-103.74<br>29501-080.59        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               | •               |                |                | •             |               |                 |
| Keyboard Control                       | 29501-080.39                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               | •               |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-080.59                        |              |              |              |              |              |              |               |                 | •              |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-080.50                        |              |              |              |              |              |              |               |                 | _              |                 |               |                 |               |                 |                 |               |                 |                |                |               |               | •               |
| Keyboard Control                       | 29501-080.63                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-060.65                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-000.67                        |              |              |              |              |              |              |               |                 |                |                 |               | •               |               |                 |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-080.71                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| Keyboard Control                       | 29501-080.78                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 | •             | •               |                |                |               |               |                 |
| Keyboard Control                       | 29501-080.85                        |              |              |              |              |              |              | •             | •               |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.11                        | •            | •            | •            |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.12                        |              |              |              | •            | •            | •            |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.22                        |              |              |              |              | _            |              |               |                 |                |                 |               |                 | •             | •               |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.26                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 | •               |               |                 |                | •              |               |               |                 |
| CRT Panel                              | 29305-022.89                        |              |              |              |              |              |              | •             | •               |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.38                        |              |              |              |              |              |              |               |                 | •              |                 |               |                 |               |                 |                 |               |                 |                |                | •             | •             |                 |
| CRT Panel                              | 29305-022.39                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 | •              |                |               |               |                 |
| CRT Panel                              | 29305-022.44                        |              |              |              |              |              |              |               |                 |                | •               | •             | •               |               |                 |                 |               |                 |                |                |               |               |                 |
| CRT Panel                              | 29305-022.75                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 | •             | •               |                |                |               |               |                 |
| EURO-AV Socket pcb                     | 29305-160.05                        |              |              |              |              |              |              | •             | •               |                |                 |               |                 |               |                 |                 |               |                 |                |                |               | •             | •               |
| EURO-AV Socket pcb                     | 29305-160.06                        |              |              |              |              |              |              |               |                 | •              |                 |               |                 |               |                 |                 |               |                 | •              |                | •             |               |                 |
| EURO-AV Socket pcb                     | 29304-060.32                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| EURO-AV Socket pcb                     | 29304-060.33                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                | •              |               |               |                 |
| Colour/RGB (PAL/SECAM)                 | 29504-105.54                        |              |              |              |              |              |              |               |                 |                |                 |               |                 | •             | •               |                 |               |                 |                |                |               |               |                 |
| Colour-Sync                            | 29504-105.56                        |              |              |              |              |              |              |               |                 |                |                 | •             |                 |               |                 |                 | •             |                 |                |                |               |               |                 |
| Colour-Sync                            | 29504-165.61                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 | •               |               |                 |                | •              |               |               |                 |
| Colour-Sync                            | 29504-165.67/.68 2)                 |              |              |              |              |              |              |               |                 |                | •               |               | •               |               |                 |                 |               | •               |                |                |               |               | Ш               |
| Feature Box                            | 29504-103.32                        |              |              |              |              |              |              | •             | •               | •              |                 |               |                 |               |                 |                 |               |                 | •              |                | •             |               |                 |
| Velocity Modulation                    | 29305-108.03                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                | •             | •             | •               |
| Cable Tuner                            | 29504-101.22                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               | •               | •               |               |                 |                | •              |               |               |                 |
| Cable Tuner                            | 29504-201.01                        |              |              |              |              |              |              | •             | •               | •              |                 |               |                 |               |                 |                 |               |                 | •              |                | •             | •             | •               |
| Cable Tuner                            | 29504-201.21                        | •            | •            | •            | •            | •            | •            |               |                 |                | •               | •             | •               |               |                 |                 | •             | •               |                |                |               |               |                 |
| AF-Amplifier                           | 29504-104.26                        |              |              |              |              |              |              | •             | •               | •              |                 |               |                 |               |                 |                 |               |                 | •              | •              |               |               |                 |
| AF-Amplifier                           | 29504-104.28                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| AF-Amplifier                           | 29504-104.63                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                | •             |               |                 |
| AF-Amplifier                           | 29504-104.66                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 | •               |               |                 |                |                |               |               |                 |
| East/West                              | 29504-107.88                        |              |              |              |              |              |              |               | •               | •              |                 |               |                 |               |                 |                 |               |                 | _              |                | •             |               |                 |
| East/West<br>SAT Unit                  | 29504-107.90<br>29504-106.23        | •            |              |              |              |              |              |               | •               |                |                 |               |                 |               |                 |                 |               |                 | •              |                |               |               |                 |
| TV-SAT Tuner                           | 29504-100.23                        |              |              |              |              |              | •            |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| Video                                  | 29504-165.63/.66                    |              |              |              |              |              |              | •             | •               | •              |                 |               |                 |               |                 |                 |               |                 | •              |                | •             |               | •               |
| Teletext VT 5336                       | 29504-103.03/.00                    |              |              |              |              |              |              |               |                 |                |                 |               |                 |               | •               |                 |               |                 |                |                |               |               |                 |
| Teletext VT 5336 VPS                   | 29504-108.86                        |              |              |              |              |              |              |               |                 |                |                 |               |                 | •             |                 |                 |               |                 |                |                |               |               |                 |
| IF-Stereo                              | 29504-102.30                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |
| IF-Stereo                              | 29504-102.33                        |              |              |              |              |              |              | •             |                 | •              |                 |               |                 |               |                 |                 |               |                 | •              |                |               | •             |                 |
| IF-Stereo                              | 29504-102.56                        |              |              |              |              |              |              |               |                 |                |                 | •             |                 |               |                 |                 | •             |                 | Ĭ              |                |               |               |                 |
| IF-Stereo (EURO-Multi 8)               | 29504-162.41                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               | •               |                 |               |                 |                |                |               |               |                 |
| IF-Stereo (CUC 7)                      | 29504-162.43                        |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 | •               |               |                 |                |                | •             |               |                 |
| IF-Stereo (CUC 7)                      | 29504-162.46                        |              |              |              |              |              |              |               | •               |                |                 |               |                 |               |                 |                 |               |                 |                | •              |               |               | •               |
| IF-Stereo Multi                        | 29504-162.56                        |              |              |              |              |              |              |               |                 |                | •               |               | •               |               |                 |                 |               | •               |                |                |               |               |                 |
| 1) Tuning module 103 77 can only be us |                                     |              |              |              |              |              |              |               |                 |                |                 |               |                 |               |                 |                 |               |                 |                |                |               |               |                 |

<sup>1)</sup> Tuning module 103.77 can only be used with Colour-Sync 29504-165.68.

<sup>2)</sup> Colour-Sync module -165.68 can only be used with Tuning module 29504-103.77.

## Module Chart of 1994/1995 Television Receivers

| Bezeichnung Designation  Tuning Module | Sachnummer<br>Part No.<br>29504-103.57 | ST 7004 | ST 7004/9 | ST 70-94 text | ST 70-155 IDTV | ST 70-155/9 IDTV | ST 70-907 text | ST 70-651/9 TOP | ST 70-675 TOP | ST 70-705 TOP | ST 70-755 TOP | ST 70-755/9 TOP | ST 70-755 SAT | ST 72-160/9 IDTV | ST 72-760 MD/TOP | ● ST 72-760/9 DPL | ST 72-761 TOP | ST 72-761/9 TOP |
|--|--|---------|-----------|---------------|----------------|------------------|----------------|-----------------|---------------|---------------|---------------|-----------------|---------------|------------------|------------------|-------------------|---------------|-----------------|
|  |  |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Tuning Module                          | 29504-103.63/.65                       |         |           |               |                | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Tuning Module                          | 29504-103.71/.77 1)                    | •       | •         |               |                |                  |                | •               |               | •             | •             | •               | •             |                  |                  |                   |               |                 |
| Tuning Module                          | 29504-103.74                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               | •               |
| Keyboard Control                       | 29501-080.02                           |         |           | •             |                |                  | •              |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.50                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.67                           |         |           |               |                |                  |                |                 |               | •             | •             | •               | •             |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.71                           |         |           |               |                |                  |                | •               |               |               |               |                 |               |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.72                           | •       | •         |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.75                           |         |           |               | •              | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Keyboard Control                       | 29501-080.78                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   | •             | •               |
| CRT Panel                              | 29305-022.24                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  | •                |                   |               |                 |
| CRT Panel                              | 29305-022.26                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  | •                 |               |                 |
| CRT Panel                              | 29305-022.31                           |         |           |               |                |                  |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| CRT Panel                              | 29305-022.37                           |         |           |               | •              | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| CRT Panel                              | 29305-022.42                           |         |           | •             |                |                  | •              |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| CRT Panel                              | 29305-022.44                           | •       | •         |               |                |                  |                | •               |               | •             | •             | •               | •             |                  |                  |                   |               | П               |
| CRT Panel                              | 29305-022.74                           |         |           |               |                |                  |                |                 | •             |               |               |                 |               |                  |                  |                   |               |                 |
| CRT Panel                              | 29305-022.75                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   | •             | lacksquare      |
| EURO-AV Socket pcb                     | 29304-060.32                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  | •                 |               |                 |
| EURO-AV Socket pcb                     | 29305-160.05                           |         |           |               | •              | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               | П               |
| EURO-AV Socket pcb                     | 29305-160.06                           |         |           |               |                |                  |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| Colour/RGB (PAL/CTI)                   | 29504-105.49                           |         |           | •             |                |                  | •              |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Colour/RGB (PAL/SECAM)                 | 29504-105.54                           |         |           |               |                |                  |                |                 | •             |               |               |                 |               |                  | •                |                   |               |                 |
| Colour-Sync                            | 29504-105.56                           | •       |           |               |                |                  |                |                 |               | •             | •             |                 | •             |                  |                  |                   | •             | П               |
| Colour-Sync                            | 29504-165.61                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  | •                 |               |                 |
| Colour-Sync                            | 29504-165.67/68 2)                     |         | •         |               |                |                  |                | •               |               |               |               | •               |               |                  |                  |                   |               |                 |
| Feature Box                            | 29504-103.32                           |         |           |               |                | •                |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| Cable Tuner                            | 29504-101.22                           |         |           | •             |                |                  | •              |                 | •             |               |               |                 |               |                  | •                | •                 |               |                 |
| Cable Tuner                            | 29504-201.01                           |         |           |               |                | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| Cable Tuner                            | 29504-201.21                           |         | •         |               |                |                  |                |                 |               |               | •             | •               | •             |                  |                  |                   |               |                 |
| Seagull Raster Corr. PCB               | 29304-019.95                           | Ĭ       | Ĭ         |               |                |                  |                |                 |               |               |               |                 |               |                  | •                |                   |               |                 |
| AF-Amplifier                           | 29504-104.26                           |         |           |               |                | •                |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| AF-Amplifier                           | 29504-104.56                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| AF-Amplifier                           | 29504-104.65                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  | •                 |               |                 |
| East/West                              | 29504-107.88                           |         |           |               |                |                  |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| East/West                              | 29504-107.93                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| SAT Unit                               | 29504-107.93                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| SAT-Tuner                              | 29504-100.22                           |         |           |               |                |                  |                |                 |               |               |               |                 | •             |                  |                  |                   |               |                 |
| Video                                  | 29504-165.63/.66                       |         |           |               | •              | •                |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| Teletext VT 5336                       | 29504-108.76                           |         |           |               |                |                  |                |                 | •             |               |               |                 |               |                  |                  |                   |               |                 |
| Teletext VT 5336 VPS                   | 29504-108.86                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo                              | 29504-108.86                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo                              | 29504-102.18                           |         |           | •             |                |                  | •              |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo                              | 29504-102.33                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo                              |  |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
|  | 29504-102.56                           | •       |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo (EURO-Multi 8)               | 29504-162.41                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo (CUC 7)                      | 29504-162.43                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |
| IF-Stereo (CUC 7)                      | 29504-162.46                           |         |           |               |                |                  |                |                 |               |               |               |                 |               | •                |                  |                   |               |                 |
| IF-Stereo (Multi)                      | 29504-162.56                           |         |           |               |                |                  |                |                 |               |               |               |                 |               |                  |                  |                   |               |                 |

<sup>1)</sup> Tuning module 103.77 can only be used with Colour-Sync module 29504-165.68.

<sup>2)</sup> Colour Sync module -165.68 can be used only with Tuning module 29504-103.77.

#### **T**\ /

## Module Chart of 1994/1995 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | ST 72-764 MD/SAT | M 72-105/9 IDTV/PIP | E 72-911 DPL | E 72-911 IDTV | M 82-105/9 IDTV/PIP | M 82-169 PAL PLUS | M 95-105/9 IDTV/PIP |
|----------------------------|------------------------|------------------|---------------------|--------------|---------------|---------------------|-------------------|---------------------|
| Tuning Module              | 29504-103.52           | •                |                     |              |               |                     |                   |                     |
| Display                    | 29501-080.59           |                  |                     |              | •             |                     |                   |                     |
| Display                    | 29501-080.60           |                  |                     | •            |               |                     |                   |                     |
| Display                    | 29501-080.69           |                  |                     |              |               | •                   |                   | •                   |
| Keyboard Control           | 29501-080.70           |                  |                     |              |               |                     | •                 |                     |
| Keyboard Control           | 29501-080.45           | •                |                     |              |               |                     |                   |                     |
| Keyboard Control           | 29501-080.30           |                  | •                   |              |               |                     |                   |                     |
| CRT Panel                  | 29305-022.26           |                  | Ĭ                   | •            |               |                     |                   |                     |
| CRT Panel                  | 29305-022.28           | •                |                     |              |               |                     |                   |                     |
| CRT Panel                  | 29305-022.20           | Ĭ                |                     |              |               |                     |                   |                     |
| CRT Panel                  | 29305-022.34           |                  |                     |              |               |                     |                   |                     |
|                            |                        |                  |                     |              |               |                     |                   |                     |
| CRT Panel                  | 29305-022.35           |                  |                     |              |               |                     |                   |                     |
| CRT Panel                  | 29305-022.84           |                  |                     |              |               |                     | •                 |                     |
| EURO-AV Socket pcb         | 29304-060.32           |                  |                     |              |               |                     |                   |                     |
| EURO-AV Socket pcb         | 29304-060.93           |                  |                     |              |               |                     | •                 |                     |
| EURO-AV Socket pcb         | 29305-160.01           | •                |                     |              |               |                     |                   |                     |
| EURO-AV Socket pcb         | 29305-160.05           |                  |                     |              |               |                     |                   |                     |
| EURO-AV Socket pcb         | 29305-160.06           |                  |                     |              |               |                     |                   |                     |
| Colour-Sync                | 29504-165.61           | •                | _                   | •            |               |                     |                   |                     |
| Feature Box                | 29504-103.32           |                  | •                   |              |               |                     |                   |                     |
| Feature Box                | 29504-103.33           |                  |                     |              |               |                     | •                 |                     |
| Velocity Modulation Module |                        |                  |                     | •            |               |                     |                   |                     |
| Velocity Modulation Module | 29305-108.03           |                  | •                   |              | •             | •                   |                   | •                   |
| Velocity Modulation Module | 29305-108.04           |                  |                     |              |               |                     | •                 |                     |
| Tuner                      | 29504-101.22           | •                |                     | •            |               |                     |                   |                     |
| Tuner                      | 29504-101.25           |                  |                     |              |               |                     | •                 |                     |
| Tuner                      | 29504-201.01           |                  | •                   |              | •             | •                   |                   | •                   |
| Seagull Raster Corr. pcb   | 29304-019.95           | •                |                     |              |               |                     |                   |                     |
| AF-Amplifier               | 29504-104.56           | •                |                     |              |               |                     |                   |                     |
| AF-Amplifier               | 29504-104.62           |                  | •                   |              |               | •                   |                   | •                   |
| AF-Amplifier               | 29504-104.63           |                  |                     |              | •             |                     |                   |                     |
| AF-Amplifier               | 29504-104.65           |                  |                     | •            |               |                     |                   |                     |
| AF-Amplifier               | 29504-104.70           |                  |                     |              |               |                     | •                 |                     |
| East/West                  | 29504-107.88           |                  | •                   |              | •             |                     |                   |                     |
| East/West                  | 29504-107.91           |                  |                     |              |               | •                   |                   |                     |
| East/West                  | 29504-107.92           |                  |                     |              |               |                     |                   | •                   |
| PIP Colour (Multi)         | 29504-165.94           |                  | •                   |              |               | •                   |                   |                     |
| SAT Unit                   | 29504-106.21           | •                |                     |              |               |                     |                   |                     |
| SAT-Tuner                  | 29504-201.61           | •                |                     |              |               |                     |                   |                     |
| Video                      | 29504-105.72           |                  |                     |              |               |                     | •                 |                     |
| Video                      | 29504-165.63/.66       |                  | •                   |              | •             | •                   |                   | •                   |
| IF-Stereo                  | 29504-102.33           | •                |                     |              |               |                     |                   |                     |
| IF-Stereo (CUC 7)          | 29504-162.43           |                  | •                   |              |               |                     |                   |                     |
| IF-Stereo (CUC 7)          | 29504-162.46           |                  |                     |              |               |                     |                   |                     |
| IF-Stereo                  | 29504-162.47           |                  |                     |              |               |                     |                   |                     |
|                            | 20001102.17            | ı                | ı                   | ı            | •             | •                   |                   | ı                   |

## Module Chart of 1994/1995 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No.           | Helsinki P 642 text | Tivoli T 655 TP | Athen T 755 TOP | Copenhagen ST 763 TOP | Copenhagen ST 763/9 TOP | Salzburg ST 770 TOP | ST 772/8 | Sydney 72 ST 1772 TOP | Sydney 72 ST 1772/9 TOP | Atlanta 72/9 IDTV ST 172/9 IDTV | SE 5574 TOP | SE 6376 TOP | 7087 | SE 7287 TOP | SE 7288/9 IDTV | XS 63/1 | 6/89 SX | XS 70/1 | XS 70/9      |
|----------------------------|----------------------------------|---------------------|-----------------|-----------------|-----------------------|-------------------------|---------------------|----------|-----------------------|-------------------------|---------------------------------|-------------|-------------|------|-------------|----------------|---------|---------|---------|--------------|
| Tuning Module              | 29504-103.71/.77 1)              |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                | •       | •       | •       | lacktriangle |
| Tuning Module              | 29504-103.74                     |                     |                 |                 | •                     | •                       |                     |          | •                     | •                       |                                 |             | •           | •    | •           |                |         |         |         |              |
| Keyboard Control           | 29501-080.44                     | •                   |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         | 1       |         |              |
| Keyboard Control           | 29501-080.46                     |                     |                 |                 |                       |                         |                     |          |                       |                         | •                               |             |             |      |             |                |         |         |         |              |
| Keyboard Control           | 29501-080.61                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             | •              |         |         |         |              |
| Keyboard Control           | 29501-080.72                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                | •       | •       | •       | •            |
| Keyboard Control           | 29501-080.73                     |                     |                 |                 | •                     | •                       | •                   |          |                       |                         |                                 |             | •           | •    |             |                |         | 1       |         |              |
| Keyboard Control           | 29501-080.74                     |                     |                 |                 |                       |                         |                     | •        |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Keyboard Control           | 29501-080.79                     |                     |                 |                 |                       |                         |                     |          | •                     | •                       |                                 |             |             |      |             |                |         |         |         |              |
| Keyboard Control           | 29501-080.80                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      | •           |                |         |         |         |              |
| CRT Panel                  | 29305-022.01                     |                     | •               |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| CRT Panel                  | 29305-022.12                     |                     |                 | •               |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| CRT Panel                  | 29305-022.07                     | •                   |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| CRT Panel                  | 29305-022.24                     |                     |                 |                 |                       |                         |                     | •        |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| CRT Panel                  | 29305-022.37                     |                     |                 |                 |                       |                         |                     |          |                       |                         | •                               |             |             |      |             | •              |         |         |         |              |
| CRT Panel                  | 29305-022.44                     |                     |                 |                 |                       | •                       |                     |          |                       |                         |                                 |             |             | •    |             |                |         | •       |         |              |
| CRT Panel                  | 29305-022.75                     |                     |                 |                 |                       |                         |                     |          | •                     | •                       |                                 |             |             |      | •           |                |         |         |         |              |
| EURO-AV Socket pcb         | 29305-160.05                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             | •              |         |         |         |              |
| Colour/RGB (PAL)           | 29504-105.15                     |                     | •               |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Colour/RGB (Multi)         | 29504-165.54                     |                     |                 |                 |                       |                         |                     | •        |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Colour-Sync                | 29504-105.56                     |                     |                 |                 | •                     |                         | •                   |          | •                     |                         |                                 |             | •           | •    | •           |                | •       |         | •       |              |
| Colour-Sync                | 29504-165.67/.68 2)              |                     |                 |                 |                       |                         |                     |          |                       | •                       |                                 |             |             |      |             |                |         |         |         |              |
| Feature Box                | 29504-103.32                     |                     |                 |                 |                       |                         |                     |          |                       |                         | •                               |             |             |      |             | •              |         |         |         |              |
| Velocity Modulation Module | 29305-108.03                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Cable Tuner                | 29504-101.22                     |                     | •               |                 |                       |                         |                     | •        |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Cable Tuner                | 29504-201.01                     | •                   |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| Cable Tuner                | 29504-201.21                     |                     |                 | •               | •                     | •                       | •                   |          | •                     | •                       |                                 | •           | •           | •    | •           |                | •       | •       | •       | •            |
| Seagull Raster Corr. PCB   | 29304-019.95                     |                     |                 |                 |                       |                         |                     | •        |                       | •                       |                                 |             |             |      |             |                |         |         |         |              |
| Seagull Raster Corr. PCB   | 29304-019.97                     |                     |                 |                 |                       |                         |                     |          |                       |                         | •                               |             |             |      |             | •              |         |         |         |              |
| AF-Amplifier               | 29504-104.26                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| East/West                  | 29504-107.89<br>29504-165.63/.66 |                     |                 |                 |                       |                         |                     |          |                       |                         | •                               |             |             |      |             | •              |         |         |         |              |
| Video<br>IF-Stereo         | 29504-105.03/.00                 |                     | •               |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| IF-Stereo                  | 29504-102.25                     |                     |                 |                 | •                     |                         | •                   |          |                       |                         |                                 |             |             | •    | •           |                | •       |         | •       |              |
| IF-Stereo (EURO-Multi 8)   | 29504-162.41                     |                     |                 |                 |                       |                         |                     | •        | •                     |                         |                                 |             |             |      |             |                |         |         |         |              |
| IF-Stereo (CUC 7)          | 29504-162.46                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             | •              |         |         |         |              |
| IF-Stereo (Multi)          | 29504-162.56                     |                     |                 |                 |                       |                         |                     |          |                       |                         |                                 |             |             |      |             |                |         |         |         |              |
| ii -Otoroo (iviuiti)       | 20007-102.00                     | ı                   | l               | ı               | l                     | •                       | ı l                 | l        | ı                     | •                       |                                 |             |             |      |             |                |         | •       | ļ       | -            |

<sup>1)</sup> Tuning module 103.77 can only be used with Colour Sync 29504-165.68.

<sup>2)</sup> Colour Sync module -165.68 can only be used with Tuning module 29504-103.77.

## Module Chart of 1995/1996 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No.       | P 37-065 | P 37-065/5 |   | P 37-730 text | P 3770 text | P 37-843 FR | P 37-845 FR | P 37-845 FR/SAT | P 40-64/4 FM/CL | P 40-64 FR/FM/CL | P 45-845 FR | T 51-711 text |    | T 51-730/5 text | T 55-64/4 FM/CL | T 55-64 FR/FM/CL | T 55-645 text | T 5570 text | T 55-730 text | T 55-730/5 text | T 55-845 FR | ST 55-750 text | ST 55-750/9 text | E 55-700 TOP/LOG TV-MAX | E 55-700/9 TOP/LOG TV-MAX | M 61-1690 DPL |
|----------------------------|------------------------------|----------|------------|---|---------------|-------------|-------------|-------------|-----------------|-----------------|------------------|-------------|---------------|----|-----------------|-----------------|------------------|---------------|-------------|---------------|-----------------|-------------|----------------|------------------|-------------------------|---------------------------|---------------|
| Tuning Module              | 29504-103.80                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  | •                       | •                         |               |
| Tuning Module              | 29504-103.95                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           | •             |
| CRT Panel                  | 29305-022.07                 |          |            |   |               |             |             | •           |                 | •               | •                |             |               |    |                 | •               | •                |               |             |               |                 |             |                |                  |                         |                           |               |
| CRT Panel                  | 29305-022.11                 |          |            |   |               |             |             | •           | •               |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 | •           |                |                  |                         |                           |               |
| CRT Panel CRT Panel        | 29305-022.12<br>29305-022.14 |          | •          | • | •             |             |             |             |                 |                 |                  | •           |               |    |                 |                 |                  |               |             |               |                 | •           |                |                  |                         |                           |               |
| CRT Panel                  | 29305-022.14                 |          |            |   |               |             |             |             |                 |                 |                  |             | •             | •  | •               |                 |                  |               |             |               |                 |             |                |                  |                         |                           |               |
| CRT Panel                  | 29305-022.13                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           | •             |
| CRT Panel                  | 29305-022.78                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             | •              |                  |                         |                           |               |
| CRT Panel                  | 29305-122.02                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             | Ĭ              |                  |                         |                           |               |
| Colour-Sync                | 29504-105.67                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           |               |
| Colour-Sync                | 29504-165.67                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           |               |
| Colour-Sync                | 29504-165.72                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           | •             |
| Velocity Modulation Module | 29305-108.06                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           | •             |
| AF-Amplifier               | 29504-104.67                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  | •                       | lacksquare                |               |
| AF-Amplifier-DPL           | 29504-104.69                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           | •             |
| SATUnit                    | 29504-106.23                 |          |            |   |               | П           |             |             | •               |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  | П                       |                           |               |
| Tuner                      | 29504-201.01                 |          |            |   |               |             |             |             |                 | •               | •                |             |               |    |                 | •               | •                |               |             |               |                 |             |                |                  |                         |                           |               |
| Tuner                      | 29504-201.21                 |          |            |   |               |             | 1)          | 1)          | 1)              |                 |                  | 1)          | 1)            | 1) | 1)              |                 |                  |               |             | 1)            | 1)              | 1)          | 1)             | 1)               | •                       | •                         | •             |
| Tuner                      | 29504-201.31                 |          | •          | • | •             |             | 1)          | 1)          | 1)              |                 |                  | 1)          | 1)            | 1) | 1)              |                 |                  |               |             | 1)            | 1)              | 1)          | 1)             | 1)               |                         |                           |               |
| Tuner                      | 75990-200.54                 | •        |            |   |               | •           |             |             |                 |                 |                  |             |               |    |                 |                 |                  | •             | •           |               |                 |             |                |                  |                         |                           |               |
| Tuner-SAT                  | 29504-201.73                 |          |            |   |               |             |             |             | •               |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  |                         |                           |               |
| Teletext                   | 29504-108.39                 |          |            |   |               |             |             |             |                 |                 | •                |             |               |    |                 |                 | lacktriangle     |               |             |               |                 |             |                |                  |                         |                           |               |
| IF-Amplifier               | 29504-102.40                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             | •              |                  |                         |                           |               |
| IF-Amplifier               | 29504-102.56                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                |                  | •                       |                           |               |
| IF-Amplifier               | 29504-162.39                 |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                | •                |                         |                           |               |
| IF-Amplifier               | 29504-162.56/.57             |          |            |   |               |             |             |             |                 |                 |                  |             |               |    |                 |                 |                  |               |             |               |                 |             |                | •                |                         | •                         | •             |
| IF/FM-Stereo               | 29504-002.32                 |          |            |   |               |             |             |             |                 | •               |                  |             |               |    |                 | •               |                  |               |             |               |                 |             |                |                  |                         |                           |               |
| IF/FM-Stereo               | 29504-042.31                 |          |            |   |               |             |             |             |                 |                 | lacktriangle     |             |               |    |                 |                 | ullet            |               |             |               |                 |             |                |                  | i I                     |                           | Į.            |

<sup>1)</sup> optionally fitted

## Module Chart of 1995/1996 Television Receivers

| Bezeichnung   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
|---|------------------|------------------|------------|------|------|-----|----------|------|-----|-----|-----|------|-----|------------|------|------|-----|-----|-----|-------------|----|-----|-----|-----|-----|-----|-----|
| Tuning Module   |                  |                  |            |      |      |     |          |      |     |     |     |      |     | <u>.0G</u> |      |      |     | G   |     | <u>.</u> 0G |    |     | 2   |     |     |     |     |
| Tuning Module   |                  |                  | >          | 0    |      | ď   |          | •    | ,   | ,   | _   | 2    |     | Ρ/L        |      |      | ď   | ΛO  | ۲   | ÞΛ          |    | >   | /ID | _   |     |     | ٥   |
| Tuning Module   | =                |                  | DT         | Ō    | xt   | 2   | <b>+</b> | .O.F | ΤV  | λŢ  | Ĕ   | Ю    | ОР  | TC         | X    | xt   | 7   | OP  | Ы   | TC          | Ğ  | DT  | ď   | ĭ   | ΑT  | Р   | 임   |
| Tuning Module   | Designation      | Part No.         | 16/        | L 6/ | ) te | 6/0 | te       | 4 T  | ] [ |     |     | 6/(  | 1 S | 6/9        | 5 te | ) te | 6/0 | 5 T | 6/9 | 9/6         | 임  | 9   | O C |     | S   | Ž   | 5/9 |
| Tuning Module   |                  |                  | 15/        | /9/  | 75(  | 75( | 40       | 40/  | 100 | 15( | 160 | 160  | 70, | 705        | 74{  | 75(  | 75( | 75  | 75  | 75          | 95 | 69  | 69  | 16, | 76′ | 762 | 292 |
| Tuning Module   |                  |                  | 3-1        | 3-7  | 33-  | 33- | 7-(      | -2   | 70- | 70- | 2   | 20   | -02 | -02        | -02  | 70-  | -02 | -02 | -02 | 20-         | 0  | 0-1 | 0-1 | 72- | 72- | 72- | 72- |
| Tuning Module   |                  |                  | <i>l</i> 6 | 9 I  | J.   | Ĭ.  | 7        | . 7( | :L  | T.  | Ë   | . TS | ĭ   | . T        | Ţ    | T.   | Ţ   | T.  | .LS | T.          | Ë  | 17  | 2 V | Ţ   | T.  | Ė   | Ë   |
| Tuning Module 29504-103.93  | Tuning Module    | 29504-003 65     |            | V    | (O   | (O) | _        | ⊥    | ()  | (O  | 0)  | (O)  | ()  | (O         | (O)  | ()   | (O) | (O  | 0)  | (U          | נט | _   | 4   | 0)  | ()  | כט  | ()  |
| Tuning Module 29504-103.71/81   |                  |                  |            |      |      |     |          |      | •   | •   | •   | •    |     |            |      |      |     |     |     |             |    |     |     | •   |     |     |     |
| Tuning Module 29504-103.71/.81  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     | •   |     |     | П   |     |
| Tuning Module   |                  |                  |            |      |      | •   |          |      |     |     |     |      | •   |            |      |      | •   |     |     |             |    |     |     |     |     |     |     |
| Tuning Module   |                  |                  |            | •    |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             | •  |     |     |     | •   | •   | •   |
| Tuning Module   |                  | 29504-103.95     |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     | •   |             |    |     |     |     |     |     |     |
| Display   | Tuning Module    | 29504-103.87     |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| CRT Panel 29305-022.39  |                  | 29504-003.81     |            |      |      |     |          |      |     |     |     |      |     | 1)         |      |      |     | 1)  |     | 1)          |    |     |     |     |     |     |     |
| CRT Panel 29305-022.39  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   |     |     |     | ш   |     |
| CRT Panel 29305-022.39  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   | •   |     |     |     |     |
| CRT Panel   |                  |                  |            |      |      |     |          |      | •   | •   | •   | •    |     |            |      |      |     |     |     |             |    |     |     | •   |     |     |     |
| CRT Panel 29305-022.75  |                  |                  | •          |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| CRT Panel   |                  |                  |            |      |      | •   |          |      |     |     |     |      | •   | •          |      |      | •   | •   | •   | •           | •  |     |     |     |     |     |     |
| EURO-AV Socket pcb EURO-AV Socket pcb 29305-160.06 Colour-Sync 29504-105.67 Colour-Sync 29504-103.32 Feature Box 29504-103.35 Velocity Modulation Module 29305-108.05 Seagul Raster Corr. pcb 29504-104.26 AF-Amplifier 29504-104.28 AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.68 AF-Amplifier 29504-104.68 AF-AmplifierDPL 29504-104.68 East/West 29504-107.62 East/West 29504-107.65 East/West 29504-107.89 SAT Unit 29504-106.22 Tuner 29504-201.21 Tuner 29504-201.31 Tuner-SAT 29504-201.31 Tuner-SAT 29504-201.31 Tuner-SAT 29504-102.35 IF-Amplifier 29504-102.36 IF-Amplifier 29504-102.56 IF-Amplifier 29504-102.57 IF-Amplifier 29504-102.48   |                  |                  |            | •    |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     | •   | •   | •   |
| EURC-AV Socket pcb  Colour-Sync  29504-105.66  Colour-Sync  29504-105.67  Colour-Sync  29504-105.67  Feature Box  29504-103.32  Feature Box  29504-103.35  Velocity Modulation Module  29305-108.05  Seagulf Raster Corr. pcb  AF-Amplifier  29504-104.26  AF-Amplifier  29504-104.26  AF-Amplifier  29504-104.63  AF-Amplifier  29504-104.63  AF-Amplifier  29504-104.68  AF-Amplifier  29504-104.69  East/West  29504-107.65  East/West  29504-107.89  EastWest  29504-107.99  EastWest  29504-107.93  SAT Unit  29504-201.21  Tuner  29504-201.31  Tuner  29504-201.31  Tuner  29504-102.33  IF-Amplifier  29504-102.36  IF-Amplifier  29504-102.56  IF-Amplifier  29504-102.57  IF-Amplifier  29504-102.57  IF-Amplifier  29504-102.57  IF-Amplifier  29504-102.57  IF-Amplifier  29504-102.57  IF-Amplifier  29504-162.48  |                  |                  |            |      | •    |     | •        | •    |     |     | _   |      |     |            | •    | •    |     |     |     |             |    |     | _   |     |     |     |     |
| Colour-Sync         29504-105.56           Colour-Sync         29504-105.67           Colour-Sync         29504-165.67           Feature Box         29504-103.32           Feature Box         29504-103.35           Velocity Modulation Module         29305-108.05           Seagull Raster Corr. pcb         29304-104.26           AF-Amplifier         29504-104.26           AF-Amplifier         29504-104.26           AF-Amplifier         29504-104.63           AF-Amplifier         29504-104.63           AF-Amplifier         29504-104.68           AF-Amplifier DPL         29504-104.68           AF-Amplifier DPL         29504-107.62           EastWest         29504-107.65           EastWest         29504-107.89           EastWest         29504-107.89           EastWest         29504-201.31           Tuner         29504-201.31           Tuner         29504-201.31           Tuner         29504-102.33           IF-Amplifier         29504-102.56           IF-Amplifier         29504-102.56           IF-Amplifier         29504-102.57           IF-Amplifier         29504-162.48   |                  |                  | •          |      |      |     |          |      |     |     | •   | •    |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| Colour-Sync 29504-105.67 Colour-Sync 29504-105.67 Peature Box 29504-103.32 Feature Box 29504-103.35 Velocity Modulation Module 29305-108.05 Seagull Raster Corr. pcb 29304-019.97 AF-Amplifier 29504-104.26 AF-Amplifier 29504-104.28 AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.68 AF-Amplifier 29504-104.69 EastWest 29504-107.65 EastWest 29504-107.89 EastWest 29504-107.93 SAT Unit 29504-201.21 Tuner 29504-201.11 Tuner 29504-201.13 Tuner 29504-201.31 Video 29504-102.33 IF-Amplifier 29504-102.56 IF-Amplifier 29504-102.57 IF-Amplifier 29504-102.57 IF-Amplifier 29504-102.57 IF-Amplifier 29504-102.57 IF-Amplifier 29504-102.57 IF-Amplifier 29504-162.48   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   |     | •   |     |     |     |
| Colour-Sync   29504-105.67  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     | •   |     |
| Feature Box   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     | •   |     |             |    |     |     |     |     |     |     |
| Feature Box         29504-103.35         ■  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| Velocity Modulation Module         29305-108.05         ■   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| Seagull Raster Corr. pcb       29304-019.97         AF-Amplifier       29504-104.26         AF-Amplifier       29504-104.88         AF-Amplifier       29504-104.65         AF-Amplifier       29504-104.63         AF-Amplifier       29504-104.68         AF-Amplifier-DPL       29504-106.89         East/West       29504-107.62         East/West       29504-107.65         East/West       29504-107.89         East/West       29504-107.93         SAT Unit       29504-201.01         Tuner       29504-201.01         Tuner       29504-201.21         Tuner       29504-201.31         Tuner-SAT       29504-201.73         Video       29504-165.73         IF-Amplifier       29504-102.33         IF-Amplifier       29504-102.56         IF-Amplifier       29504-102.57         IF-Amplifier       29504-162.46         IF-Amplifier       29504-162.48  |                  |                  | •          |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   | •   |     |     |     |     |
| AF-Amplifier  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     | Ĭ   | •   |     |     |     |
| AF-Amplifier 29504-104.28   |                  |                  |            |      |      |     |          |      | •   | •   | •   | •    |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| AF-Amplifier 29504-104.56   |                  |                  | •          |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| AF-Amplifier 29504-104.63 AF-Amplifier 29504-104.68 AF-Amplifier-DPL 29504-107.62 East/West 29504-107.65 East/West 29504-107.89 East/West 29504-107.93 SAT Unit 29504-201.01 Tuner 29504-201.21 Tuner 29504-201.21 Tuner 29504-201.31 Tuner 29504-201.73 Video 29504-165.64 Video 29504-165.73 IF-Amplifier 29504-102.56 IF-Amplifier 29504-102.57 IF-Amplifier 29504-162.48  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     | •   |     | П   |     |
| AF-Amplifier  AF-Amplifier-DPL  29504-104.68  AF-Amplifier-DPL  29504-107.62  East/West  29504-107.65  East/West  29504-107.89  East/West  29504-107.93  SAT Unit  29504-201.01  Tuner  29504-201.21  Tuner  29504-201.31  Tuner-SAT  Video  29504-165.64  Video  1F-Amplifier  29504-102.56  IF-Amplifier  29504-102.57  IF-Amplifier  29504-162.46  IF-Amplifier  29504-162.48  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   |     |     |     |     |     |
| AF-Amplifier-DPL 29504-104.69 29504-107.62  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     | •   |     |     | П   |     |
| East/West 29504-107.65  | AF-Amplifier-DPL |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     | •   |             |    |     |     |     |     |     |     |
| East/West 29504-107.89 East/West 29504-106.22 Tuner 29504-201.01 Tuner 29504-201.21 Tuner 29504-201.31 Tuner-SAT 29504-201.73 Video 29504-165.64 Video 29504-165.73 IF-Amplifier 29504-102.56 IF-Amplifier 29504-102.57 IF-Amplifier 29504-162.48   |                  | 29504-107.62     |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   | •   |     |     | П   |     |
| East/West 29504-107.93  | East/West        |                  | •          |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| SAT Unit       29504-106.22       □        □  | East/West        | 29504-107.89     |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     | •   |     |     |     |
| Tuner 29504-201.21  |                  |                  |            |      |      |     |          |      | •   | •   | •   | •    |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| Tuner 29504-201.21  |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     | •   |     |     |
| Tuner       29504-201.31       1)<   |                  |                  | •          |      |      |     | •        | •    | •   | •   | •   | •    |     |            |      |      |     |     |     |             |    | •   | •   | •   |     |     |     |
| Tuner-SAT       29504-201.73       ■  |                  |                  |            | •    |      | •   |          |      |     |     |     |      | •   | •          |      |      | •   | •   | •   | •           | •  |     |     |     | •   | •   | •   |
| Video       29504-165.64       ●  |                  |                  |            |      | 1)   |     |          |      |     |     |     |      |     |            | 1)   | 1)   |     |     |     |             |    |     |     |     |     |     |     |
| Video       29504-165.73       ■ ● ● ● ■       ■ ● ● ■       ■ ● ■ ■       ■ ■       ■       ■<   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     | •   |     |     |
| IF-Amplifier       29504-102.33         IF-Amplifier       29504-102.56         IF-Amplifier       29504-102.57         IF-Amplifier       29504-162.46         IF-Amplifier       29504-162.48   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| IF-Amplifier       29504-102.56         IF-Amplifier       29504-102.57         IF-Amplifier       29504-162.46         IF-Amplifier       29504-162.48   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    | •   |     |     |     |     |     |
| IF-Amplifier       29504-102.57         IF-Amplifier       29504-162.46         IF-Amplifier       29504-162.48   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| IF-Amplifier         29504-162.46         ●         ■ <td></td> |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     |     |     |     |     |     |
| IF-Amplifier 29504-162.48   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      | •    |     |     |     |             |    |     |     |     |     |     |     |
|   |                  |                  |            |      |      |     |          |      |     |     |     |      |     |            |      |      |     |     |     |             |    |     | •   |     |     |     |     |
|   | IF-Amplifier     | 29504-162.56/.57 |            | •    |      | •   |          |      |     |     |     |      |     | •          |      |      | •   |     | •   | •           |    |     |     |     |     |     | •   |

<sup>1)</sup> optionally fitted

2.28 Grundig Service

#### T١

## Module Chart of 1995/1996 Television Receivers

| Bezeichnung<br>Designation        | Sachnummer<br>Part No.           | ST 72-161/9 IDTV | M 72-115 IDTV | M 72-215 IDTV/Referenz | M 72-215/9 IDTV/PIP/Referenz | E 72-170 IDTV Eleganz | E 72-911 DPL/IDTV | M 82-169/9 IDTV | ST 84-796/9 TOP/LOG | M 95-115/9 IDTV/PIP | o 737 text GRE | T 5574 TOP GREENVILLE 55 |   | ST 770/9 TOP HAMBURG |   | ST 170 IDTV Boston | SE 7088 IDTV | XS 55/1 | XS 55/9 | XS 63/2 |
|-----------------------------------|----------------------------------|------------------|---------------|------------------------|------------------------------|-----------------------|-------------------|-----------------|---------------------|---------------------|----------------|--------------------------|---|----------------------|---|--------------------|--------------|---------|---------|---------|
| Tuning Module                     | 29504-003.81/.87                 |                  |               |                        | _                            |                       |                   |                 | •                   | _                   |                | •                        | • |                      |   |                    |              |         |         |         |
| Tuning Module                     | 29504-003.65                     |                  |               |                        |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| Tuning Module                     | 29504-103.74/.84                 |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   | •                    | • |                    |              |         |         |         |
| Tuning Module                     | 29504-103.93                     | •                |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      |   | •                  |              |         |         |         |
| Keyboard Control Keyboard Control | 29501-080.21<br>29501-080.97     |                  | •             | •                      | •                            |                       |                   |                 |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| Keyboard Control                  | 29501-080.82                     |                  |               |                        |                              |                       |                   | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| Keyboard Control                  | 29501-082.19                     |                  |               |                        |                              |                       | •                 | Ĭ               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-022.12                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                | •                        |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-022.31                     |                  | •             | •                      | •                            |                       | •                 |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-022.35                     |                  |               |                        |                              |                       |                   |                 |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-022.36                     |                  |               |                        |                              |                       |                   | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-022.37                     | •                |               |                        |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| CRT Panel CRT Panel               | 29305-022.44<br>29305-022.77     |                  |               |                        |                              |                       |                   |                 | •                   |                     |                |                          | • |                      | • |                    |              |         |         |         |
| CRT Panel                         | 29305-022.77                     |                  |               |                        |                              |                       |                   |                 | •                   |                     |                |                          |   |                      |   |                    |              |         | •       |         |
| CRT Panel                         | 29305-122.02                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| CRT Panel                         | 29305-122.06                     |                  |               |                        |                              |                       |                   |                 |                     |                     | •              |                          |   |                      |   |                    |              |         |         |         |
| EURO-AV Socket pcb                | 29305-160.05                     |                  | •             | •                      | •                            | •                     |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| EURO-AV Socket pcb                | 29305-160.06                     | •                |               |                        |                              |                       | •                 | •               |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| Colour-Sync                       | 29504-105.56                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      | • |                    |              |         |         |         |
| Colour-Sync                       | 29504-105.67                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          | • |                      |   |                    |              |         |         |         |
| Colour-Sync<br>Colour-Sync        | 29504-165.67<br>29504-165.70     |                  |               |                        |                              |                       |                   |                 | •                   |                     |                |                          |   | •                    |   |                    |              |         |         |         |
| Feature Box                       | 29504-103.70                     | •                | •             |                        |                              | •                     | •                 |                 |                     | •                   |                |                          |   |                      |   | •                  | •            |         |         |         |
| Feature Box                       | 29504-103.35                     | Ŭ                | Ŭ             |                        |                              |                       |                   | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| Feature Box                       | 29504-103.36                     |                  |               | •                      | •                            |                       |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| Velocity Modulation Module        | 29305-108.05                     | •                | •             | •                      | •                            |                       |                   | •               | •                   | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| Seagull Raster Corr. pcb          | 29304-019.97                     | •                |               |                        |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| AF-Amplifier                      | 29504-104.26                     |                  |               |                        |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| AF-Amplifier                      | 29504-104.56                     | •                | •             |                        | •                            |                       |                   | •               |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| AF-Amplifier<br>AF-Amplifier-DPL  | 29504-104.63<br>29504-104.68     |                  |               |                        |                              |                       | •                 | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-104.68                     |                  |               |                        |                              |                       | Ì                 | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-107.64                     |                  | •             | •                      | •                            |                       |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-107.67                     |                  |               |                        |                              |                       |                   |                 |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-107.88                     |                  |               |                        |                              |                       | •                 |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-107.89                     | •                |               |                        |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| East/West                         | 29504-107.93                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| PIP Colour-Multi                  | 29504-165.94                     |                  |               |                        | •                            |                       |                   |                 |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
| Tuner<br>Tuner                    | 29504-201.01<br>29504-201.21     | •                | •             | •                      | •                            | •                     | •                 | •               | •                   | •                   | 1)             | 1)                       | • | •                    |   | •                  | •            | 1)      | 1)      | 1)      |
| Tuner                             | 29504-201.21                     |                  |               |                        |                              |                       |                   |                 |                     |                     | 1)             | 1)                       |   |                      |   |                    |              | 1)      |         | 1)      |
| Video                             | 29504-165.64                     |                  | •             | •                      | •                            | •                     |                   |                 |                     | •                   | .,             | .,                       |   |                      |   |                    |              | .,      | .,      | .,      |
| Video                             | 29504-165.71                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| Video                             | 29504-165.73                     | •                |               |                        |                              |                       | •                 | •               |                     |                     |                |                          |   |                      |   |                    |              |         |         |         |
| IF-Amplifier                      | 29504-102.33                     |                  | •             | •                      |                              | •                     |                   |                 |                     |                     |                |                          |   |                      |   | •                  | •            |         |         |         |
| IF-Amplifier                      | 29504-102.56                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          | • |                      | • |                    |              |         |         |         |
| IF-Amplifier                      | 29504-102.57                     |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          |   |                      |   |                    |              |         |         | •       |
| IF-Amplifier IF-Amplifier         | 29504-162.46                     | •                |               |                        | •                            |                       |                   | •               |                     | •                   |                |                          |   |                      |   |                    |              |         |         |         |
|                                   | 29504-162.48<br>29504-162.56/.57 |                  |               |                        |                              |                       | •                 |                 | •                   |                     |                |                          |   |                      |   |                    |              |         | •       |         |
| IF-Amplifier                      |                                  |                  |               |                        |                              |                       |                   |                 |                     |                     |                |                          | _ | _                    |   |                    |              |         |         |         |
| IF-Amplifier IF-Amplifier         | 29504-102.40                     |                  |               |                        |                              |                       |                   |                 | _                   |                     | •              |                          |   |                      |   |                    |              | •       |         |         |

<sup>1)</sup> optionally fitted

#### TV

## Module Chart of 1996/1997 Television Receivers

| Tuning Module   | Bezeichnung<br>Designation | Sachnummer<br>Part No. | P 37-065/5 | P 37-071 | P 37-731 text | P 37-731/12 text | P 37-843 a FR | P 45-731 text | T 51-070 | T 51-731 text | T 51-732/5 text | T 55-731 text | T 55-732/5 text | T 55-843 FR | ST 55-876/9 text | ST 55-95 ECO | M 61-1690 TOP/LOG | ST 63-160 a IDTV | ST 63-255 IDTV/LOG | ST 63-255/8 IDTV/LOG | M 63-280 IDTV/LOG | M 63-280/8 IDTV/LOG | ST 63-720/8 text | ST 63-725/8 text | ST 63-800 TOP/LOG | ST | ST 70-255 IDTV/LOG | ST 70-255/8 IDTV/LOG | ST 70-705/8 text |
|---|----------------------------|------------------------|------------|----------|---------------|------------------|---------------|---------------|----------|---------------|-----------------|---------------|-----------------|-------------|------------------|--------------|-------------------|------------------|--------------------|----------------------|-------------------|---------------------|------------------|------------------|-------------------|----|--------------------|----------------------|------------------|
| Tuning Module   | Tuning Module              | 29504-003.81           |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  | 1)                | 1) |                    |                      |                  |
| Tuning Module   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              | •                 |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.16  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  | 1)                | 1) |                    |                      |                  |
| CRT Panel 29305-022.15  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.16  |                            |                        | •          | •        | •             | •                |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.17 CRT Panel 29305-022.39 CRT Panel 29305-022.78 CRT Panel 29305-022.78 CRT Panel 29305-022.78 CRT Panel 29305-122.04 CRT Panel 29305-122.05 EURO-AV Socket pcb 29304-160.66 Colour-Sync 29504-105.67 Colour-Sync 29504-165.74 Feature Box 29504-103.32 Feature Box 29504-103.37 Velocity Modulation Module 29305-108.06 AF-Amplifier 29504-107.64 Signal Module 29504-102.34 Signal Module 29504-102.34 Tuner 29504-201.21 1) Tuner 29504-201.21 1) Tuner 29504-201.31 1) Tuner 29504-201.31 1) Tuner 29504-102.33 Audio-IF-Amplifier 29504-102.36 IIF-Amplifier 29504-102.36 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 IIF-Amplifier 29504-102.57   |                            |                        |            |          |               |                  |               |               | •        |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.39  |                            |                        |            |          |               |                  |               |               |          | •             | •               | •             | •               | •           |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.44  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             | •                | •            |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-022.78  |                            |                        | _          |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   | •                |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| CRT Panel 29305-122.04  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  | •                 | •  |                    |                      |                  |
| EURO-AV Socket pcb  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              | •                 |                  |                    | _                    |                   |                     |                  |                  |                   |    |                    |                      |                  |
| EURO-AV Socket pcb  Colour-Sync  29504-105.67  Colour-Sync  29504-165.74  Feature Box  Feature Box  29504-103.32  Feature Box  Velocity Modulation Module  AF-Amplifier  29504-102.34  Signal Module  29504-102.34  Signal Module  29504-201.21  Tuner  29504-201.21  Tuner  8140-601-610  Video  29504-102.33  Audio-IF-Amplifier  29504-102.33  Audio-IF-Amplifier  29504-102.33  Audio-IF-Amplifier  29504-102.34  IF-Amplifier  29504-102.33  Audio-IF-Amplifier  29504-102.33  Audio-IF-Amplifier  29504-102.33  Audio-IF-Amplifier  29504-102.36  Audio-IF-Amplifier  29504-102.56  Audio-IF-Amplifier  29504-162.57  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Colour-Sync 29504-105.67 Colour-Sync 29504-165.74 Feature Box 29504-103.37 Velocity Modulation Module 29504-104.28 East/West 29504-102.34 Signal Module 29504-201.21 1) Tuner 29504-201.31 1) Tuner 29504-201.31 1) Tuner 29504-201.31 1) Tuner 8140-601-610 Video 29504-102.33 Audio-IF-Amplifier 29504-102.40 IF-Amplifier 29504-102.40 IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-162.39 IF-Amplifier 29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     | •                | •                |                   |    |                    |                      |                  |
| Colour-Sync 29504-165.67 Colour-Sync 29504-165.74 Feature Box 29504-103.32 Feature Box 29504-103.37 Velocity Modulation Module AF-Amplifier 29504-104.28 East/West 29504-102.34 Signal Module 29504-201.21 1) Tuner 29504-201.21 1) Tuner 29504-201.31 1) Tuner 8140-601-610 Video 29504-102.33 Audio-IF-Amplifier 29504-102.40 IF-Amplifier 29504-102.56 Audio-IF-Amplifier 29504-162.39 IF-Amplifier 29504-162.39 IF-Amplifier 29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Colour-Sync   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  | •                 |    |                    |                      |                  |
| Feature Box   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Feature Box         29504-103.37         □  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              | •                 |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Velocity Modulation Module         29305-108.06           AF-Amplifier         29504-104.28           East/West         29504-107.64           Signal Module         29504-102.34           Signal Module         29504-162.34           Tuner         29504-201.21           Tuner         29504-201.31           1)         1)           29504-102.39           1 <td></td> |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| AF-Amplifier 29504-104.28   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  | •                  | •                    | •                 | •                   |                  |                  |                   |    | •                  | •                    |                  |
| East/West 29504-107.64 Signal Module 29504-162.34 Signal Module 29504-201.21 1) 1) 1) 1) 1) 1) 0 0 0 0 0 0 0 0 0 0  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Signal Module       29504-102.34         Signal Module       29504-162.34         Tuner       29504-201.21         1)       1) <td></td> <td>_</td> <td></td>   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   | _                |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Signal Module 29504-162.34  |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Tuner 29504-201.21 1)   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  | •                  |                      | •                 |                     |                  |                  |                   |    | •                  |                      |                  |
| Tuner   | 0                          |                        |            |          |               |                  |               |               | 4)       |               |                 |               |                 | 4)          | 4)               | 41           |                   |                  |                    |                      |                   |                     | 4)               | 4)               |                   |    |                    |                      | 4                |
| Tuner 8140-601-610  |                            |                        | 1)         |          |               |                  |               |               |          |               |                 |               |                 |             | 1)               | 1)           | •                 |                  | •                  | •                    | •                 | •                   |                  |                  | •                 | •  |                    | _                    | 1)               |
| Video       29504-165.71         IF-Amplifier       29504-102.33         Audio-IF-Amplifier       29504-102.40         IF-Amplifier       29504-102.56         Audio-IF-Amplifier (Nicam)       29504-162.39         IF-Amplifier       29504-162.57  |                            |                        | 1)         |          |               |                  |               |               | 1)       |               |                 |               |                 | 1)          | 1)               | 1)           |                   |                  |                    |                      |                   |                     | 1)               | 1)               |                   |    |                    |                      | 1)               |
| IF-Amplifier       29504-102.33         Audio-IF-Amplifier       29504-102.40         IF-Amplifier       29504-102.56         Audio-IF-Amplifier (Nicam)       29504-162.39         IF-Amplifier       29504-162.57   |                            |                        |            | •        |               |                  |               |               |          |               |                 | •             |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Audio-IF-Amplifier 29504-102.40 IF-Amplifier 29504-102.56 Audio-IF-Amplifier (Nicam) 29504-162.39 IF-Amplifier 29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| IF-Amplifier       29504-102.56         Audio-IF-Amplifier (Nicam)       29504-162.39         IF-Amplifier       29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| Audio-IF-Amplifier (Nicam)       29504-162.39         IF-Amplifier       29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
| IF-Amplifier 29504-162.57   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
|   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             |                  |              |                   |                  |                    |                      |                   |                     |                  |                  |                   |    |                    |                      |                  |
|   |                            |                        |            |          |               |                  |               |               |          |               |                 |               |                 |             | j                |              |                   |                  |                    |                      |                   |                     |                  | •                |                   |    |                    |                      |                  |

<sup>1)</sup> optionally fitted

2.30 Grundig Service

# Module Chart of 1996/1997 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | ⇒ ST 70-705/9 TOP/LOG | ST 70-720/8 text | ST 70-725/8 text | ST 70-728 text | ST 70-755/9 DPL/LOG | ⇒ ST 70-760 TOP/LOG | ⇒ ST 70-800 TOP/LOG | ⇒ ST 70-800/9 TOP/LOG | ST 70-869 IDTV | T 70-843 FR | M 70-1690 DPL/IDTV/LOG | M 70-1690 TOP/LOG | M 70-269 PALplus/LOG | M 70-269/9 Referenz | M 70-280 IDTV/LOG | M 70-280/8 IDTV/LOG | ST 72-261 IDTV/LOG | ST 72-261/8 IDTV/LOG | ST 72-760 text | ST 72-760/8 text |
|----------------------------|------------------------|-----------------------|------------------|------------------|----------------|---------------------|---------------------|---------------------|-----------------------|----------------|-------------|------------------------|-------------------|----------------------|---------------------|-------------------|---------------------|--------------------|----------------------|----------------|------------------|
| Tuning Module              |                        | 1)                    |                  |                  |                |                     | 1)                  | 1)                  | 1)                    |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Tuning Module              | 29504-003.88           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Tuning Module              | 29504-003.95           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        | •                 |                      |                     |                   |                     |                    |                      |                |                  |
| Tuning Module              | 29504-103.68           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Tuning Module              | 29504-103.87           | 1)                    |                  |                  |                |                     | 1)                  | 1)                  | 1)                    |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-022.36           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-022.44           | •                     |                  |                  |                | •                   |                     | •                   | •                     |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-022.75           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        | •                 |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-122.01           |                       |                  |                  |                |                     | ullet               |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-122.04           |                       |                  |                  |                |                     |                     |                     |                       | •              |             |                        |                   |                      |                     | •                 | •                   |                    |                      |                |                  |
| CRT Panel                  | 29305-122.05           |                       | •                | •                | •              |                     |                     |                     |                       |                | ullet       |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-122.07           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    | •                   |                   |                     |                    |                      |                |                  |
| CRT Panel                  | 29305-122.10           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     | 2)                 | 2)                   |                |                  |
| CRT Panel                  | 29305-122.11           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      | •              | •                |
| CRT Panel                  | 29305-122.12           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     | 2)                 | 2)                   |                |                  |
| EURO-AV Socket pcb         | 29305-160.15           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| EURO-AV Socket pcb         | 29305-160.34           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    |                     |                   |                     |                    |                      |                |                  |
| Colour-Sync                | 29504-105.67           |                       |                  |                  |                |                     | •                   | •                   |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Colour-Sync                | 29504-165.67           | •                     |                  |                  |                | •                   |                     |                     | •                     |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Colour-Sync                | 29504-165.74           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        | •                 |                      |                     |                   |                     |                    |                      |                |                  |
| Feature Box                | 29504-103.35           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Feature Box                | 29504-103.37           |                       |                  |                  |                |                     |                     |                     |                       | •              |             |                        |                   |                      |                     | •                 | •                   | •                  | •                    |                |                  |
| Feature Box                | 29504-103.38           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    |                     |                   |                     |                    |                      |                |                  |
| Feature Box                | 29504-103.41           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      | •                   |                   |                     |                    |                      |                |                  |
| Velocity Modulation Module | 29305-108.05           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      | •                 |                      |                     |                   |                     |                    |                      |                |                  |
| AF-Amplifier               | 29504-104.68           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| AF-Amplifier               | 29504-104.69           |                       |                  |                  |                | •                   |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| AF-Amplifier               | 29504-104.71           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    |                     |                   |                     |                    |                      |                |                  |
| AF-Amplifier               | 29504-104.72           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      | •                   |                   |                     |                    |                      |                |                  |
| East/West                  | 29504-107.62           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| Signal Module              | 29504-102.34           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     | •                 |                     | •                  |                      |                |                  |
| Signal Module              | 29504-162.34           |                       |                  |                  |                |                     |                     |                     |                       | •              |             |                        |                   |                      |                     |                   | •                   |                    | •                    |                |                  |
| Signal Module              | 29504-162.35           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    | •                   |                   |                     |                    |                      |                |                  |
| Tuner                      | 29504-201.21           | •                     | 1)               | 1)               | 1)             | •                   | •                   | •                   | •                     | •              |             | •                      | •                 | •                    | •                   | •                 | •                   | •                  | •                    | 1)             | 1)               |
| Tuner                      | 29504-201.31           |                       | 1)               | 1)               | 1)             |                     |                     |                     |                       |                | •           |                        |                   |                      |                     |                   |                     |                    |                      | 1)             | 1)               |
| VGA Module                 | 29305-160.35           |                       |                  |                  |                |                     |                     |                     |                       |                |             |                        |                   | •                    |                     |                   |                     |                    |                      |                |                  |
| Video                      | 29504-165.73           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| IF-Amplifier               | 29504-102.56           |                       |                  |                  |                |                     | •                   | •                   |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| IF-Amplifier               | 29504-102.57           |                       |                  |                  | •              |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      | •              |                  |
| IF-Amplifier               | 29504-142.30           |                       |                  |                  |                |                     |                     |                     |                       |                | •           |                        |                   |                      |                     |                   |                     |                    |                      |                |                  |
| IF-Amplifier               | 29504-162.48           |                       |                  |                  |                |                     |                     |                     |                       |                |             | •                      |                   |                      |                     |                   |                     |                    |                      |                |                  |
| IF-Amplifier               | 29504-162.57           | •                     |                  |                  |                | •                   |                     |                     | •                     |                |             |                        | •                 |                      |                     |                   |                     |                    |                      |                |                  |
| IF-Amplifier               | 29504-162.58           |                       | •                | •                |                |                     |                     |                     |                       |                |             |                        |                   |                      |                     |                   |                     |                    |                      |                | •                |

<sup>1)</sup> optionally fitted 2) Philips picture tube -122.10, Toshiba picture tube -122.12

#### TV

# Module Chart of 1996/1997 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No.       | M 72-315/9 IDTV/PIP/Referenz | M 72-315 IDTV/Referenz | M 82-169 a PALplus | M 82-1690/9 TOP/LOG | M 82-269 PALplus/LOG | M 82-269/9 Reference | M 84-410/8 IDTV/LOG | M 95-410/90 Referenz/PIP | DENVER SE 8216/9 PIP/Referenz | ATLANTA SE 7289 IDTV/LOG | BERLIN SE 7290 IDTV/LOG | BOSTON ST 270 IDTV/LOG | BOSTON ST 270/8 IDTV/LOG | TRENTO SE 7016/9 PIP/Referenz | COPENHAGEN ST 763 TOP/LOG | GREENVILLE 7002 text | GREENVILLE 7002/8 text | LISSABON SE 5576 text | SYDNEY ST 872/8 text | SE 6376 TOP/LOG | SE 7089 IDTV/LOG | XS 63/81 | XS 70/81 |
|----------------------------|------------------------------|------------------------------|------------------------|--------------------|---------------------|----------------------|----------------------|---------------------|--------------------------|-------------------------------|--------------------------|-------------------------|------------------------|--------------------------|-------------------------------|---------------------------|----------------------|------------------------|-----------------------|----------------------|-----------------|------------------|----------|----------|
| Tuning Module              | 29504-003.84                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      | •               | i I              |          | 1        |
| Tuning Module              | 29504-003.95                 |                              |                        |                    | •                   |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Tuning Module              | 29504-103.74                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               | 1)                        |                      |                        |                       |                      |                 | П                |          |          |
| Tuning Module              | 29504-103.84                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               | 1)                        |                      |                        |                       |                      |                 |                  |          |          |
| Keyboard Control           | 29501-082.33                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 | i                |          |          |
| Keyboard Control           | 29501-082.34                 |                              |                        | •                  |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Keyboard Control           | 29501-082.42                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 | П                |          |          |
| CRT Panel                  | 29305-022.17                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        | •                     |                      |                 |                  |          |          |
| CRT Panel                  | 29305-022.37                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 | П                |          |          |
| CRT Panel                  | 29305-022.44                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               | •                         |                      |                        |                       |                      | •               |                  |          |          |
| CRT Panel                  | 29305-022.77                 |                              |                        |                    | •                   |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 | П                |          |          |
| CRT Panel                  | 29305-022.84                 |                              |                        | •                  |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| CRT Panel                  | 29305-122.04                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         | •                      | •                        |                               |                           |                      |                        |                       |                      |                 | •                |          |          |
| CRT Panel                  | 29305-122.05                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           | •                    | •                      |                       |                      |                 |                  | •        | •        |
| CRT Panel                  | 29305-122.07                 |                              |                        |                    |                     | •                    | •                    |                     | •                        | •                             |                          |                         |                        |                          | •                             |                           |                      |                        |                       |                      |                 | i                |          |          |
| CRT Panel                  | 29305-122.10                 |                              |                        |                    |                     |                      |                      | •                   |                          |                               | •                        |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| CRT Panel                  | 29305-122.11                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       | •                    |                 | i                |          |          |
| EURO-AV Socket pcb         | 29304-060.93                 |                              |                        | •                  |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| EURO-AV Socket pcb         | 29305-160.05                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          | lacktriangle            |                        |                          |                               |                           |                      |                        |                       |                      |                 | i                |          |          |
| EURO-AV Socket pcb         | 29305-160.34                 |                              |                        |                    |                     | •                    | •                    |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Colour-Sync                | 29504-105.56                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               | •                         |                      |                        |                       |                      |                 |                  |          |          |
| Colour-Sync                | 29504-105.57                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      | •               |                  |          |          |
| Colour-Sync                | 29504-165.74                 |                              |                        |                    | •                   |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 | Ш                |          |          |
| Feature Box                | 29504-103.36                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Feature Box                | 29504-103.37                 |                              |                        |                    |                     |                      |                      | •                   |                          |                               | •                        |                         | •                      | •                        |                               |                           |                      |                        |                       |                      |                 | •                |          |          |
| Feature Box                | 29504-103.38                 |                              |                        |                    |                     | •                    |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Feature Box                | 29504-103.39                 |                              |                        | •                  |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Feature Box                | 29504-103.41                 |                              |                        |                    |                     |                      |                      |                     | •                        | •                             |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Velocity Modulation Module | 29305-108.04                 |                              | _                      | •                  |                     |                      |                      |                     |                          |                               |                          | _                       |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Velocity Modulation Module | 29305-108.05                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Velocity Modulation Module | 29305-108.06                 |                              |                        |                    | •                   |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| AF-Amplifier               | 29504-104.26                 |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| AF-Amplifier               | 29504-104.29                 | •                            | •                      |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| AF-Amplifier               | 29504-104.70                 |                              |                        | •                  |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
|                            |                              |                              |                        |                    |                     |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| AF-Amplifier AF-Amplifier  | 29504-104.71<br>29504-104.72 |                              |                        |                    |                     |                      |                      |                     | •                        |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |

<sup>1)</sup> optionally fitted



#### т\/

# Module Chart of 1996/1997 Television Receivers

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | M 72-315/9 IDTV/PIP/Referenz | M 72-315 IDTV/Referenz | M 82-169 a PALplus | M 82-269 PALplus/LOG | M 82-269/9 Reference | M 84-410/8 IDTV/LOG | M 95-410/90 Referenz/PIP | DENVER SE 8216/9 PIP/Referenz | ATLANTA SE 7289 IDTV/LOG | BERLIN SE 7290 IDTV/LOG | BOSTON ST 270 IDTV/LOG | BOSTON ST 270/8 IDTV/LOG | TRENTO SE 7016/9 PIP/Referenz | COPENHAGEN ST 763 TOP/LOG | GREENVILLE 7002 text | GREENVILLE 7002/8 text | LISSABON SE 5576 text | SYDNEY ST 872/8 text | SE 6376 TOP/LOG | SE 7089 IDTV/LOG | XS 63/81 | XS 70/81 |
|----------------------------|------------------------|------------------------------|------------------------|--------------------|----------------------|----------------------|---------------------|--------------------------|-------------------------------|--------------------------|-------------------------|------------------------|--------------------------|-------------------------------|---------------------------|----------------------|------------------------|-----------------------|----------------------|-----------------|------------------|----------|----------|
| East/West                  | 29504-107.65           | •                            | •                      |                    |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| PIP Colour-Multi           | 29504-165.94           | •                            |                        |                    |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| PIP                        | 29504-165.96           |                              |                        |                    |                      |                      |                     | •                        | •                             |                          |                         |                        |                          | •                             |                           |                      |                        |                       |                      |                 | $\Box$           |          |          |
| Signal Module              | 29504-102.34           |                              |                        |                    |                      |                      |                     |                          |                               | •                        |                         | •                      |                          |                               |                           |                      |                        |                       |                      |                 | •                |          |          |
| Signal Module              | 29504-162.34           |                              |                        |                    |                      |                      | •                   |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 | Ш                |          |          |
| Signal Module              | 29504-162.35           |                              |                        |                    | •                    | •                    |                     | •                        |                               |                          |                         |                        | •                        | •                             |                           |                      |                        |                       |                      |                 |                  |          |          |
| Tuner                      | 29504-201.01           | •                            | •                      |                    |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  | Ш        |          |
| Tuner                      | 29504-201.21           |                              |                        | •                  | •                    | •                    | •                   | •                        |                               | •                        |                         | •                      | •                        | •                             | •                         | 1)                   | 1)                     |                       | 1)                   | •               | •                | 1)       |          |
| Tuner                      | 29504-201.31           |                              |                        |                    |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           | 1)                   | 1)                     | 1)                    | 1)                   |                 |                  | 1)       | 1)       |
| Tuner                      | 29504-101.25           |                              |                        | •                  |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| VGA Module                 | 29305-160.35           |                              |                        |                    | •                    | •                    |                     | •                        | •                             |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 | Ш                |          |          |
| Video                      | 29504-105.72           |                              |                        | •                  |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| Video                      | 29504-165.64           | •                            | •                      |                    |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 | Ш                |          |          |
| Audio IF                   | 29504-102.40           |                              |                        |                    |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| IF-Amplifier Stereo        | 29504-102.33           |                              | •                      |                    |                      |                      |                     |                          |                               |                          | •                       |                        |                          |                               |                           |                      |                        |                       |                      |                 | Ш                |          |          |
| IF-Amplifier Stereo        | 29504-102.56           |                              |                        |                    |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      | •               |                  |          |          |
| IF-Amplifier Stereo        | 29504-102.57           |                              |                        |                    |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           | •                    |                        |                       |                      |                 |                  |          |          |
| IF-Amplifier (Multi)       | 29504-162.47           |                              |                        | •                  |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| IF-Amplifier (Multi)       | 29504-162.48           | •                            |                        |                    |                      |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       |                      |                 |                  |          |          |
| IF-Amplifier (Multi)       | 29504-162.57           |                              |                        | •                  | •                    |                      |                     |                          |                               |                          |                         |                        |                          |                               |                           |                      |                        |                       | Ţ                    |                 |                  |          |          |
| IF-Amplifier (Multi)       | 29504-162.58           |                              |                        |                    |                      |                      |                     |                          |                               |                          |                         | l                      |                          |                               |                           |                      | •                      |                       | ullet                |                 |                  |          |          |

<sup>1)</sup> optionally fitted

# **Module Chart of 1997/1998 Television Receivers**

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | ● P 37-732/5 text | T 51-071 | M 55-280/8 IDTV/LOG | ST 55-800 text | ST 55-800/9 text | ST 55-800 a text | ST 55-800 NIC/TOP | ST 63-700 FR/TOP | ST 63-700 NIC/TOP | ST 63-700 text | ST 63-780 NIC/TOP | ST 63-780 text | M 63-281 IDTV/LOG | M 63-281/8 IDTV/LOG | ST 70-270 IDTV | ST 70-270/8 IDTV | ST 70-700 DPL/NIC/FT | ST 70-700 FR/TOP | ST 70-700 NIC/TOP | ST 70-700 text | ST 70-770 text | ST 70-778 text | ST 70-780 FR/TOP | ST 70-780 NIC/TOP | ST 70-780 text | ST 70-97 IDTV |
|----------------------------|------------------------|-------------------|----------|---------------------|----------------|------------------|------------------|-------------------|------------------|-------------------|----------------|-------------------|----------------|-------------------|---------------------|----------------|------------------|----------------------|------------------|-------------------|----------------|----------------|----------------|------------------|-------------------|----------------|---------------|
| CRT Panel                  | 29305-022.14           | •                 | '        |                     | 0,             | <u> </u>         | 0,               | 0,                | 0,               | 0,                | 0,             | 0,                | 0,             |                   |                     | 0,             | 0,               | 0,                   | 0,               | 0,                | 0,             | 0,             | 0,             | 0,               | ٠,                | 0,             | <u> </u>      |
| CRT Panel                  | 29305-022.16           |                   | •        |                     |                |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| CRT Panel                  | 29305-022.17           |                   |          |                     | •              | •                |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| CRT Panel                  | 29305-022.19           |                   |          |                     |                |                  | •                | •                 |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| CRT Panel                  | 29305-122.04           |                   |          | •                   |                |                  |                  |                   |                  |                   |                |                   |                | •                 | •                   | •              | •                |                      |                  |                   |                |                |                |                  |                   |                | •             |
| CRT Panel                  | 29305-122.05           |                   |          |                     |                |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                | •              | •              |                  |                   |                |               |
| CRT Panel                  | 29305-122.16           |                   |          |                     |                |                  |                  |                   | •                | •                 | •              | •                 | •              |                   |                     |                |                  | •                    | •                | •                 | •              |                |                | •                | •                 | •              |               |
| Feature Box                | 29504-103.37           |                   |          | •                   |                |                  |                  |                   |                  |                   |                |                   |                | •                 | •                   | •              | •                |                      |                  |                   |                |                |                |                  |                   |                | •             |
| AF-Amplifier               | 29504-104.41           |                   |          |                     |                |                  | •                |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| AF-Amplifier               | 29504-104.43           |                   |          |                     |                |                  |                  | •                 |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| AF-Amplifier               | 29504-104.75           |                   |          |                     |                |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  | •                    |                  |                   |                |                |                |                  |                   |                |               |
| Signal Module              | 29504-102.34           |                   |          |                     |                |                  |                  |                   |                  |                   |                |                   |                | •                 |                     | •              |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| Signal Module              | 29504-162.34           |                   |          | •                   |                |                  |                  |                   |                  |                   |                |                   |                |                   | •                   |                | •                |                      |                  |                   |                |                |                |                  |                   |                |               |
| Tuner                      | 29504-201.21           |                   |          | •                   |                |                  |                  |                   |                  |                   |                |                   |                | •                 | •                   | •              | •                |                      |                  |                   |                | 1)             | 1)             |                  |                   |                |               |
| Tuner                      | 29504-201.31           |                   |          |                     | •              | •                |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                | 1)             | 1)             |                  |                   |                |               |
| Tuner                      | 8140-601-610           | •                 | •        |                     |                |                  | 1)               | 1)                |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| Tuner                      | 8140-601-612           |                   |          |                     |                |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  | 1)                   |                  |                   |                |                |                |                  |                   |                |               |
| Tuner                      | 8140-601-613           |                   |          |                     |                |                  |                  |                   | •                |                   |                |                   |                |                   |                     |                |                  | 1)                   | •                |                   |                |                |                | •                |                   |                |               |
| Tuner                      | 8140-601-614           |                   |          |                     |                |                  | 1)               | 1)                |                  | •                 | •              | •                 | •              |                   |                     |                |                  |                      |                  | •                 | •              |                |                |                  | •                 | •              |               |
| IF-Amplifier (Multi)       | 29504-162.57           |                   |          |                     |                | •                |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| Audio-IF Stereo            | 29504-102.40           |                   |          |                     | •              |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| Audio-IF (Nicam)           | 29504-162.39           |                   |          |                     |                | •                |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                |                |                |                  |                   |                |               |
| IF-Amplifier               | 29504-102.57           |                   |          |                     |                |                  |                  |                   |                  |                   |                |                   |                |                   |                     |                |                  |                      |                  |                   |                | •              | •              |                  |                   |                |               |

<sup>1)</sup> optionally fitted

т.,

2.34 Grundig Service

#### T١

# Module Chart of 1997/1998 Television Receivers / cont'd

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | M 70-281 IDTV/LOG | M 70-281/8 IDTV/LOG | MW 70-100/8 | MW 70-269 PAL PLUS | ST 72-860 FR/TOP | ST 72-860 NIC/TOP | ST 72-860 TOP | ST 72-865 NIC/TOP | M 72-100 | M 72-100/8 | M 72-410/9 Reference | M 72-410 Reference/PIP | M 72-410 Reference | M 72-270 IDTV/LOG Elegance | MW 82-100/9 | MW 82-100/9 PAL PLUS | M 95-410/9 a Reference/PIP |
|----------------------------|------------------------|-------------------|---------------------|-------------|--------------------|------------------|-------------------|---------------|-------------------|----------|------------|----------------------|------------------------|--------------------|----------------------------|-------------|----------------------|----------------------------|
| CRT Panel                  | 29305-122.04           | •                 | •                   |             |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| CRT Panel                  | 29305-122.07           |                   |                     |             |                    |                  |                   |               |                   |          |            | •                    | •                      | •                  |                            |             |                      | •                          |
| CRT Panel                  | 29305-122.10           |                   |                     |             |                    |                  |                   |               |                   | •        | •          |                      |                        |                    | •                          |             |                      |                            |
| CRT Panel                  | 29305-122.14           |                   |                     |             | •                  |                  |                   |               |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| CRT Panel                  | 29305-122.15           |                   |                     |             |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            | •           | •                    |                            |
| CRT Panel                  | 29305-122.17           |                   |                     | •           |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| CRT Panel                  | 29305-122.18           |                   |                     |             |                    | •                | •                 | •             | •                 |          |            |                      |                        |                    |                            |             |                      |                            |
| EURO-AV Socket pcb         | 29305-160.34           |                   |                     |             | •                  |                  |                   |               |                   |          |            | •                    | •                      | •                  |                            | •           | •                    | •                          |
| Feature Box                | 29504-103.37           | •                 | •                   |             |                    |                  |                   |               |                   | •        | •          |                      |                        |                    | •                          |             |                      | Ш                          |
| Feature Box                | 29504-103.38           |                   |                     |             | •                  |                  |                   |               |                   |          |            |                      |                        |                    |                            |             | •                    |                            |
| Feature Box                | 29504-103.41           |                   |                     |             |                    |                  |                   |               |                   |          |            | •                    | •                      | •                  |                            | •           |                      | •                          |
| Feature Box                | 29504-103.42           |                   |                     | •           |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| AF-Amplifier               | 29504-104.81           |                   |                     |             |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            |             | •                    |                            |
| AF-Amplifier               | 29504-104.82           |                   |                     |             |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            | •           |                      |                            |
| AF-Amplifier               | 29504-104.83           |                   |                     |             |                    |                  |                   |               |                   |          |            | •                    | •                      | •                  |                            |             |                      |                            |
| PIP                        | 29504-165.96           |                   |                     |             |                    |                  |                   |               |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| PIP                        | 29504-165.97           |                   |                     |             |                    |                  |                   |               |                   |          |            |                      | •                      |                    |                            |             | •                    | ш                          |
| Signal Module              | 29504-102.34           | •                 |                     |             |                    |                  |                   |               |                   | •        |            |                      |                        |                    | •                          |             |                      |                            |
| Signal Module              | 29504-102.35           |                   |                     |             | •                  |                  |                   |               |                   |          |            |                      | •                      | •                  |                            |             |                      | ш                          |
| Signal Module              | 29504-162.34           |                   | •                   | •           |                    |                  |                   |               |                   |          | •          |                      |                        |                    |                            |             |                      |                            |
| Signal Module              | 29504-162.35           |                   |                     |             |                    |                  |                   |               |                   |          |            | •                    |                        |                    |                            | •           | •                    |                            |
| Tuner                      | 29504-201.21           | •                 | •                   | •           |                    |                  |                   |               |                   |          | •          |                      | •                      |                    |                            | •           |                      |                            |
| Tuner                      | 8140-601-612           |                   |                     |             |                    |                  |                   | 1)            |                   |          |            |                      |                        |                    |                            |             |                      | Ш                          |
| Tuner                      | 8140-601-613           |                   |                     |             |                    |                  | •                 | 1)            |                   |          |            |                      |                        |                    |                            |             |                      |                            |
| VGA                        | 29305-160.35           |                   |                     |             |                    |                  |                   |               |                   |          |            | •                    | •                      |                    |                            | •           | •                    |                            |

<sup>1)</sup> optionally fitted

# Module Chart of 1997/1998 Television Receivers

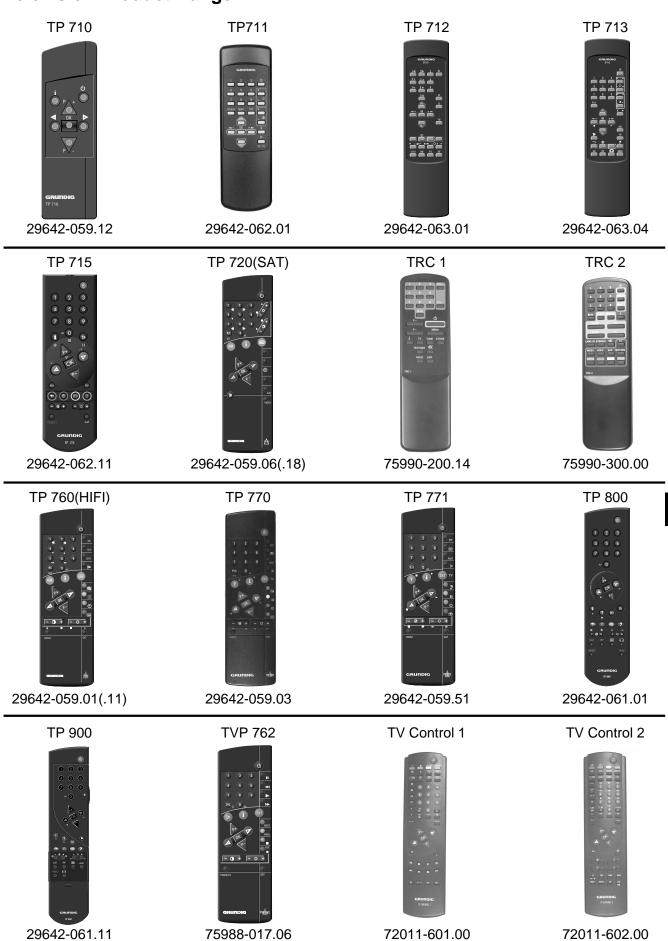
|                            |                        |                          |                            |                    |                         |                           |                           |                           |                         |                      |                           |                       |                             | (D                              |                         |                           |
|----------------------------|------------------------|--------------------------|----------------------------|--------------------|-------------------------|---------------------------|---------------------------|---------------------------|-------------------------|----------------------|---------------------------|-----------------------|-----------------------------|---------------------------------|-------------------------|---------------------------|
| Bezeichnung<br>Designation | Sachnummer<br>Part No. | Atlanta SE 7220 IDTV/LOG | Atlanta SE 7220 a IDTV/LOG | Berlin SE 70-100/8 | Boston SE 7090 IDTV/LOG | Boston SE 7090/8 IDTV/LOG | Denver SE 82-100 PAL PLUS | Denver SE 8216/9 PAL PLUS | Greenville 7003 NIC/TOP | Greenville 7003 text | Melbourne SE 7210 NIC/TOP | Melbourne SE 7210 TOP | Sydney 100 SE 7020 IDTV/LOG | Sydney 100/8 SE 7020/8 IDTV/LOG | Trento SE 7026 PAL PLUS | Wien 100 SE 6320 IDTV/LOG |
| CRT Panel                  | 29305-122.04           | A                        | ۷                          | В                  | <u>B</u>                | ●<br>B                    | D                         | D                         | 9                       | g                    | 2                         | 2                     | <b>⊙</b>                    | S                               | Ė                       | ≤                         |
| CRT Panel                  | 29305-122.10           | •                        |                            |                    |                         |                           |                           |                           |                         |                      |                           |                       |                             |                                 |                         |                           |
| CRT Panel                  | 29305-122.14           |                          |                            |                    |                         |                           |                           |                           |                         |                      |                           |                       |                             |                                 | •                       |                           |
| CRT Panel                  | 29305-122.15           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 |                         |                           |
| CRT Panel                  | 29305-122.16           |                          |                            |                    |                         |                           |                           |                           | •                       | •                    |                           |                       |                             |                                 |                         |                           |
| CRT Panel                  | 29305-122.17           |                          | •                          | •                  |                         |                           |                           |                           |                         |                      |                           |                       |                             |                                 |                         |                           |
| CRT Panel                  | 29305-122.18           |                          |                            |                    |                         |                           |                           |                           |                         |                      | •                         | •                     |                             |                                 |                         |                           |
| EURO-AV Socket pcb         | 29305-160.34           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 | •                       |                           |
| Feature Box                | 29504-103.37           | •                        |                            |                    | •                       | •                         |                           |                           |                         |                      |                           |                       | •                           | •                               |                         | •                         |
| Feature Box                | 29504-103.38           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 | •                       |                           |
| Feature Box                | 29504-103.42           |                          | •                          | •                  |                         |                           |                           |                           |                         |                      |                           |                       |                             |                                 |                         |                           |
| AF-Amplifier               | 29504-104.82           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 | •                       |                           |
| Signal Module              | 29504-102.34           | •                        | •                          |                    | •                       |                           |                           |                           |                         |                      |                           |                       | •                           |                                 |                         | •                         |
| Signal Module              | 29504-102.35           |                          |                            |                    |                         |                           |                           |                           |                         |                      |                           |                       |                             |                                 | •                       |                           |
| Signal Module              | 29504-162.34           |                          |                            | •                  |                         | •                         |                           |                           |                         |                      |                           |                       |                             | •                               |                         |                           |
| Signal Module              | 29504-162.35           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 |                         |                           |
| Tuner                      | 29504-201.21           | •                        | •                          | •                  | •                       | •                         | •                         | •                         |                         |                      |                           |                       | •                           | •                               | •                       | •                         |
| Tuner                      | 8140-601-612           |                          |                            |                    |                         |                           |                           |                           |                         |                      |                           | 1)                    |                             |                                 |                         |                           |
| Tuner                      | 8140-601-613           |                          |                            |                    |                         |                           |                           |                           |                         |                      | •                         | 1)                    |                             |                                 |                         |                           |
| Tuner                      | 8140-601-614           |                          |                            |                    |                         |                           |                           |                           | •                       | •                    |                           |                       |                             |                                 |                         |                           |
| VGA                        | 29305-160.35           |                          |                            |                    |                         |                           | •                         | •                         |                         |                      |                           |                       |                             |                                 |                         |                           |

1) optionally fitted

т.,

#### **T**\/

# **GRUNDIG Tele-Pilot® Remote Control Handsets / Types Television Product Range**



# Retro-fitting Options for Colour Television Receivers General Overview

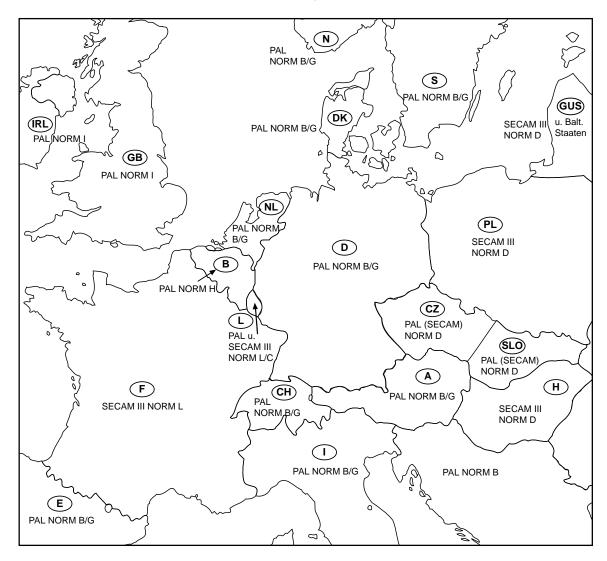
- 1. To receive additional or different standards
- 2. Teletext
- 3. Connecting sockets
- 4. Satellite reception

The following tables show which retro-fit kit or module is required in each case.

In **Table 1** all CCIR-PAL Colour Television Receivers of the last 4 years (as of October 1997) are listed along with a number code.

Using **Table 2**, these number codes can be used to establish the module required to achieve retrofit or conversion requirements. Redundant modules are also indicated.

All modules and adapters listed in this chapter are obtainable from the Service or Sales Department operated by Grundig Branches and Sales Companies.



2.38 Grundig Service

| Continuation of Table 1                             | Secam | Secam | NTSC          | GB      | OIRT           | Tele- | SAT       | S-VHS    | Video+ | L/Loud-     |
|---|-------|-------|---------------|---------|----------------|-------|-----------|----------|--------|-------------|
| to establish the number code                        | East  | West  | Sound         | Sound   | Sound          | text  | Reception |          | Audio  | speaker     |
|   |       | 2)    | 4.5 MHz       | 6.0 MHz | 6.5 MHz        |       |           |          | Cinch  |             |
| Colour TV   | Nove  | Norm  | Nove          | Marina  | Nove           |       |           |          |        | k/Head-     |
| Series 1993/94                                      | Norm  | Norm  | Norm          | Norm    | Norm           |       |           |          |        | phone       |
| P 37-060  | B/G   | L     | M<br>3 3)     | 1<br>1  | D/K/K′<br>2 3) |       |           |          |        | 3.5 mm<br>k |
| P 37-640 text                                       |       | _     | 3 3)          | 1       | 23)            | -     |           |          |        | k           |
| P 40-060  |       |       | 3 3)          | 1       | 2 3)           | _     |           |          | _      | k           |
| P 40-640 text                                       | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | •      | k           |
| P 42-060  | _     | _     | 3 3)          | 1       | 2 3)           | _     | _         | _        | -      | k           |
| P 45-640 text                                       | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | •      | k           |
| M 45-775 TOP  | •     | _     | 3 3)          | 1       | 2              | •     | _         | •        | •      | k           |
| P 50-640 text                                       | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | •      | k           |
| M 50-775 TOP  | •     | _     | 3 3)          | 1       | 2              | •     | _         | •        | •      | k           |
| T 51-060  | _     | _     | 3 3)          | 1       | 2 3)           | _     | _         | _        | _      | k           |
| T 51-640 text<br>T 55-060                           | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | _      | k<br>k      |
| T 55-640 text                                       | _     | _     | 3 3)          | 1       | 23)            | -     | _         | _        | _      | k           |
| M 55-775 TOP  | •     |       | 3 3)          | 1       | 23)            | •     |           | <u> </u> | -      | k           |
| M 55-775/8 TOP 1)                                   |       | •     | <b>33</b> ) ● | •       | € 2.5)         | •     |           |          |        | k           |
| T 63-640 a text                                     |       | _     | 3 3)          | 1       | 2 3)           | •     |           |          |        | k           |
| ST 63-671 text                                      | 5     | _     | 3 3)          | 1       | 2              | •     | _         | _        | _      | k           |
| M 63-775 TOP  | •     | _     | 3 3)          | 1       | 2              | •     | _         | •        | •      | k           |
| M 63-775/8 TOP 1)                                   | •     | •     | •             | •       | •              | •     | _         | •        | •      | k           |
| T 70-640 a text                                     | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | _      | k           |
| ST 70-169 TOP                                       | •     | 10    | 10            | 10      | 10             | •     |           | •        | •      | k           |
| ST 70-169/9 TOP 1)                                  | •     | •     | •             | •       | •              | •     | _         | •        | •      | k           |
| ST 70-665 text                                      | 5     | _     | 3 3)          | 1       | 2              | •     | _         |          | _      | k           |
| ST 70-655/8 text 1)<br>ST 70-93 text                | •     | •     | 0.0)          | •       | •              | •     | _         | _        | _      | k           |
| ST 7003   | 5     | _     | 3 3)          | 1       | 2              | •     | _         | _        | _      | k<br>k      |
| ST 72-760 TOP                                       | •     |       | 3 3)          | 1       | 2              |       | _         | -        | •      | k           |
| ST 72-760/8 TOP 1)                                  | •     | •     | •             | •       | •              | •     |           | •        | •      | k           |
| ST 72-764 SAT                                       | •     | _     | _             | _       | _              | •     | •         | •        | •      | k           |
| ST 72-160 IDTV                                      | •     | 10    | 10            | 10      | 10             | •     | _         | •        | •      | k           |
| M 72-105 IDTV                                       | •     | 10    | 10            | 10      | 10             | •     | _         | •        | •      | k           |
| M 72-105/9 IDTV 1)                                  | •     | •     | •             | •       | •              | •     | _         | •        | •      | k           |
| M 72-795 TOP  | •     | 10    | 10            | 10      | 10             | •     |           | •        | •      | k           |
| M 72-795/9 TOP 1)                                   | •     | •     | •             | •       | •              | •     | _         | •        | •      | k           |
| E 72-911 TOP<br>ST 8277 TOP                         | •     | •     | •             | •       | •              | •     |           | •        | •      | k           |
| M 82-795 TOP  |       | 10    | 10            | 10      | 10             | •     | _         |          | •      | k           |
| M 82-795/9 PIP/TOP 1)                               |       | 10    | 10            | 10      | 10             |       | _         | -        |        | k<br>k      |
| M 82-105/9 IDTV 1)                                  |       |       | •             |         |                |       |           | •        | •      | Lk          |
| M 95-795/9 PIP/TOP 1)                               | •     | •     | •             | •       | •              | •     |           | •        | •      | k           |
| M 95-105/9 IDTV 1)                                  | •     | •     | •             | •       | •              | •     | _         | •        | •      | Lk          |
| T 1655 text ATHEN                                   | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | _      | k           |
| ST 1663 text COPENHAGEN                             | 5     | _     | 3 3)          | 1       | 2              | •     | _         | _        | _      | k           |
| ST 1663/8 text COPENHAGEN 1)                        | •     | •     | •             | •       | •              | •     | _         | _        | _      | k           |
| ST 2670 text STOCKHOLM                              | 5     |       | 3 3)          | 1       | 2              | •     |           |          |        | k           |
| ST 3670 text STOCKHOLM                              | 5     | _     | 3 3)          | 1       | 2              | •     | _         | _        | _      | k           |
| ST 772 TOP Sydney 72<br>ST 172 IDTV Atlanta 72 IDTV | •     |       | 3 3)          | 1       | 2              | •     | _         | •        | •      | k           |
| SE 4264 text  | •     | 10    | 10            | 10      | 10             | •     | _         | •        | •      | k           |
| SE 5564 text  |       | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | _      | k<br>k      |
| SE 6367 text  | 5     |       | 3 3)          | 1       | 2 3)           |       |           |          |        | k           |
| SE 7075 text  | 5     | _     | 3 3)          | 1       | 2              | •     | _         |          | _      | k           |
| SE 7085 text  | 5     | _     | 3 3)          | 1       | 2              | •     |           | _        | _      | k           |
| SE 7286 TOP   | •     | _     | 3 3)          | 1       | 2              | •     | _         | •        | •      | k           |
| SE 7288 IDTV  | •     | 10    | 10            | 10      | 10             | •     | _         | •        | •      | k           |
| STEELER   | _     | _     | 3 3)          | 1       | 2 3)           | •     | _         | _        | •      | k           |
| XS 55   | 5     | _     | 3 3)          | 1       | 2              | •     |           |          | _      | k           |
| XS 55/8 1)  | •     | •     | •             | •       | •              | •     | _         | _        | _      | k           |
| XS 63   | 5     | _     | 3 3)          | 1       | 2              | •     |           |          | _      | k           |
| XS 63/8 1)<br>VS 70/8 1)                            | •     | •     | •             | •       | •              | •     | _         | _        | _      | k           |
| XS 70/8 1)<br>XC 701                                | 5     | •     | 3 3)          | 1       | 2              | •     | _         | _        | _      | k<br>k      |

<sup>1)</sup> additionally with NICAM-Stereo-System 2) with models /8 no reception of French Band I 3) without colour

| Continuation of Table 1                | Secam | Secam | NTSC    | GB      | OIRT     | Tele- | SAT       | S-VHS | Video+ | k/Head- |
|--|-------|-------|---------|---------|----------|-------|-----------|-------|--------|---------|
| to establish the number code           | East  | West  | Sound   | Sound   | Sound    | text  | Reception |       | Audio  | phone   |
|  |       | 2)    | 4.5 MHz | 6.0 MHz | 6.5 MHz  | 10/11 |           |       | Cinch  | 3.5 mm  |
|  |       |       |         | 0.02    | 0.0      |       |           |       | 0      | 0.0     |
| Colour TV                              | Norm  | Norm  | Norm    | Norm    | Norm     |       |           |       |        |         |
| Series 1994/95                         | B/G   | L     | М       | 1       | D/K/K′   |       |           |       |        |         |
| P 37-740 SAT                           |       | _     |         | _       | _        | •     | •         |       | •      | k       |
| P 37-740 TOP                           | _     | _     | _       | _       | _        | •     | 17        | _     | •      | k       |
| P 40-740 TOP                           |       | _     | _       | _       | _        | •     | 17        | _     | •      | k       |
| P 45-740 TOP                           | _     | _     | _       | _       | _        | •     | 17        | _     | •      | k       |
| T 55-740 TOP                           | _     | _     | _       | _       | _        | •     | 17        | _     | •      | k       |
| T 55-740 SAT                           | _     | _     | _       | _       | _        | •     | •         | _     | •      | k       |
| M 55-105 IDTV                          | •     | 10    | 10      | 10      | 10       | •     | _         | •     | •      | k       |
| M 55-105/9 IDTV                        | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |
| ST 63-160 IDTV                         | •     | 10    | 10      | 10      | 10       | •     |           | •     | •      | k       |
| ST 63-651/9 TOP                        | •     | •     | •       | •       | •        | •     | 18        | •     | _      | k       |
| ST 63-755 TOP                          | 13    | _     | _       | _       |          | •     | 18        | •     | •      | k       |
| ST 63-755/9 TOP                        | •     | •     | •       | •       | •        | •     | 18        | •     | •      | k       |
| ST 63-760 TOP                          | •     | _     | 3 3)    | 1       | 2        | •     | _         | •     | •      | k       |
| ST 63-760/8 TOP                        | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |
| ST 63-760/9 DPL                        | 40    | •     | •       | •       | •        | •     |           | •     | •      | k       |
| ST 63-761 TOP                          | 13    | _     | _       | _       |          | •     | 18        | •     | •      | k       |
| ST 63-761/9 TOP<br>ST 63-781 IDTV      | •     | 10    | 40      | 10      | 10       | •     | 18        | •     | •      | k       |
| E 63-911 IDTV                          | _     | 10    | 10      | 10      | 10       | •     | _         | _     | •      | k       |
| M 63-105 IDTV                          | •     | 10    | 10      | 10      | 10       | •     | _         | •     | •      | k       |
| M 63-105/9 IDTV                        |       | •     | •       | •       | •        | •     | _         |       |        | k<br>k  |
| ST 7004                                | 13    |       | •       |         | _        | -     | 18        |       | _      | k       |
| ST 7004/9                              | 13    | •     | •       | •       | •        | •     | 18        |       |        | k       |
| ST 70-94 text                          | 5     |       | 3 3)    | 1       | 2        | •     | -         |       |        | k       |
| ST 70-155 IDTV                         | •     | 10    | 10      | 10      | 10       | •     |           | •     | •      | k       |
| ST 70-155/9 IDTV                       |       | •     | •       | •       | •        | •     |           | •     | •      | k       |
| ST 70-907 text                         | 5     | _     | 3 3)    | 1       | 2        | •     |           | _     | _      | k       |
| ST 70-651/9 TOP                        | •     | •     | •       | •       | •        | •     | 18        | •     | _      | k       |
| ST 70-675 TOP                          | •     | _     | 3 3)    | 1       | 2        | •     | _         | •     | •      | k       |
| ST 70-705 TOP                          | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| ST 70-755 TOP                          | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| ST 70-755/9 TOP                        | •     | •     | •       | •       | •        | •     | 18        | •     | •      | k       |
| ST 70-755 SAT                          | 13    | _     | _       | _       | _        | •     | •         | •     | •      | k       |
| ST 72-160/9 IDTV                       | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |
| ST 72-760 MD/TOP                       | •     |       | 3 3)    | 1       | 2        | •     |           | •     | •      | k       |
| ST 72-760/9 DPL                        | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |
| ST 72-761 TOP                          | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| ST 72-761/9 TOP                        | •     | •     | •       | •       | •        | •     | 18        | •     | •      | k       |
| ST 72-764 MD/SAT<br>M 72-105/9 IDTV    | •     | •     | _       | •       | <u> </u> | •     | _         | •     | •      | k       |
| M 72-105/9 IDTV<br>M 72-105/9 IDTV/PIP |       |       |         |         |          |       | _         |       |        | k<br>k  |
| E 72-911 DPL                           |       |       |         |         |          | •     |           |       |        | k<br>k  |
| E 72-911 IDTV                          |       |       |         |         |          |       |           |       |        | k<br>k  |
| M 82-105/9 IDTV/PIP                    |       |       |         |         |          | •     |           |       | •      | k       |
| M 82-169 PAL PLUS                      |       |       | •       |         |          | •     | _         |       | •      | k       |
| M 82-169/9 IDTV                        | •     | •     | •       | •       | •        | •     |           | •     | •      | k       |
| M 95-105/9 IDTV/PIP                    | •     | •     | •       | •       | •        | •     |           | •     | •      | k       |
| Helsinki P 642 text                    | _     | _     | 3 3)    | 1       | 2 3)     | •     | _         | _     | _      | k       |
| Tivoli T 655 TP                        | 4     | _     | 3 3)    | 15 1)   | 16 1)    | •     | _         | _     | _      | k       |
| Athen T 755 TOP                        | _     | _     |         |         | _        | •     | 17        | _     | •      | k       |
| Copenhagen ST 763 TOP                  | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| Salzburg ST 770 TOP                    | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| Sydney 72 ST 772/8 TOP                 | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |
| Sydney 72 ST 1772 TOP                  | 13    | _     | _       | _       | _        | •     | 18        | •     | •      | k       |
| Sydney 72 ST 1772/9 TOP                | •     | •     | •       | •       | •        | •     | 18        | •     | •      | k       |
| Atlanta 72/9 IDTV ST 172/9             | •     | •     | •       | •       | •        | •     | _         | •     | •      | k       |

<sup>1)</sup> Conversion for the exclusive reception of 6.0- or 6.5-MHz sound. If 5.5 MHz is to be received optionally (5.5/6.0 or 5.5 6.5 MHz), an audio module must be fitted instead of IF 29504-112.25/-182.25 (see number code 23 or 24)

2.40 Grundig Service

<sup>2)</sup> except French Band I 3) without colour

to establish the number code

Secam

East

Norm

B/G

13

13

13

13

•

13

NTSC

Sound

4.5 MHz

Norm

Secam

West

2)

Norm

GB

Sound

6.0 MHz

Norm

OIRT

Sound

6.5 MHz

Norm

D/K/K

Tele-

text

SAT

Reception

17

18

18

18

18

18

18

S-VHS

**Continuation of Table 1** 

Colour TV

Series 1994/95

SE 5574 TOP

SE 6376 TOP SE 7087 TOP SE 7287 TOP

XS 63/1

XS 63/9

XS 70/1

XS 70/9

k/Head-

phone

k

k

k

k

k

k

3.5 mm

Video+

Audio

Cinch

| F | ١ | į |  |
|---|---|---|--|

| Continuation of Table 1                | Secam | Secam | NTSC        | GB          | OIRT        | Tele- | SAT       | S-VHS   | Video+  | Head-              |
|--|-------|-------|-------------|-------------|-------------|-------|-----------|---------|---------|--------------------|
| to establish the number code           | East  | West  | Sound       | Sound       | Sound       | text  | Reception | Hosiden | Audio   | phone              |
|  |       | 2)    | 4.5 MHz     | 6.0 MHz     | 6.5 MHz     |       |           | or      | Cinch   | Socket             |
|  |       | 2)    | 4.5 IVII 12 | 0.0 IVII 12 | 0.5 IVII 12 |       |           |         | Ciricii |                    |
| Colour TV                              | Norm  | Norm  | Norm        | Norm        | Norm        |       |           | Euro-AV |         | k = 3.5<br>K = 6.3 |
|  |       |       |             |             |             |       |           |         |         | N = 0.3            |
| Series 1995/96<br>P 37-065             | B/G   | L     | M           | I           | D/K/K′      |       |           |         |         |                    |
| P 37-065                               | _     | _     | _           | _           | _           |       | _         | _       | _       | _                  |
| P 37-730 text                          | _     | _     |             | _           | _           | -     | _         | _       | _       | _                  |
| P 3770 text                            | _     | _     |             | _           | _           | •     | _         | _       | _       |                    |
| P 40-64/4 FM/CL                        | •     |       |             | •           | •           | 14    |           | _       | •       | <u> </u>           |
| T 51-711 text                          |       |       |             |             |             | •     | _         |         |         | _                  |
| T 51-730 text                          |       |       |             |             |             | •     |           |         |         |                    |
| T 51-730/5 text                        | •     | _     | 1)3)4)      |             | •           | •     | _         | _       |         |                    |
| T 55-64/4 FM/CL                        | •     |       | 1,0,1,      | •           | •           | 14    |           |         | •       | k                  |
| T 55-645 text                          |       | _     | _           | _           |             | •     | _         | _       |         | _                  |
| T 55-730 text                          |       |       |             |             | _           | •     | _         | _       | _       | k                  |
| T 55-730/5 text                        | •     | _     | 1)3)4)      | _           | •           | •     | _         | _       | _       | k                  |
| ST 55-750 text                         | _     | _     |             | _           | _           | •     | _         | •       | •       | k                  |
| ST 55-750/9 text                       | •     | •     | •           | •           | •           | •     | _         | •       | •       | k                  |
| E 55-700 TOP/LOG TV-Max                | 13    | _     | _           |             | _           | •     | 18        | •       | •       | К                  |
| E 55-700/9 TOP/LOG TV-Max              | •     | •     | •           | •           | •           | •     | 18        | •       | •       | K                  |
| ST 63-255/8 IDTV                       | •     | •     | 1)3)4)      | •           | •           | •     | 19        | •       | •       | k                  |
| ST 63-750 text                         | _     | _     |             | _           | _           | •     | _         | _       | •       | k                  |
| ST 63-750/9 TOP                        | •     | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| M 61-1690 DPL                          | •     | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| M 63-115/9 IDTV                        | •     | •     | •           | •           | •           | •     | _         | •       | •       | k                  |
| M 63-776/9 TOP                         | •     | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| T 70-740 text                          | _     | _     | _           | _           | _           | •     | _         | _       | _       | k                  |
| T 70-740 TOP                           | _     | _     | _           | _           | _           | •     | _         | _       | •       | k                  |
| T 70-740/4 TOP                         | •     | _     | _           | _           | •           | •     | _         | _       | •       | k                  |
| ST 70-100 IDTV                         | •     | 10    | 10          | 10          | 10          | •     | _         | •       | _       | k                  |
| ST 70-150 IDTV                         | •     | 10    | 10          | 10          | 10          | •     | _         | •       | •       | k                  |
| ST 70-160 IDTV                         | •     | 10    | 10          | 10          | 10          | •     | _         | •       | •       | k                  |
| ST 70-160/9 IDTV                       | •     | •     | •           | •           | •           | •     | _         | •       | •       | k                  |
| ST 70-255/8 IDTV                       | •     | •     | 1)3)4)      | •           | •           | •     | 19        | •       | •       | k                  |
| ST 70-705/9 TOP                        | •     | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| ST 70-745 text                         | _     | _     | _           | _           | _           | •     | _         | _       | _       | k                  |
| ST 70-750 text                         | _     | _     | _           | _           | _           | •     | _         |         | •       | k                  |
| ST 70-750/9 TOP<br>ST 70-755 TOP/LOG   | •     | •     | •           | •           | •           | •     | 18        | _       | •       | k                  |
|  | 13    | _     | _           | _           | _           | •     | 18        | •       | •       | k                  |
| ST 70-755/9 DPL<br>ST 70-755/9 TOP/LOG |       | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| ST 70-755/9 TOP/LOG                    | 13    | •     | •           | •           | •           | •     | 18<br>18  |         | •       | k<br>k             |
| M 70-169/9 IDTV                        | 13    | •     | •           | •           | •           | •     | 10        |         | -       | k                  |
| M 70-169/9 IDTV                        |       | •     |             | •           | •           | •     | _         | •       | •       | k                  |
| ST 72-161 IDTV                         |       | 10    | 10          | 10          | 10          | •     |           |         |         | k                  |
| ST 72-161/9 IDTV                       | •     | •     | •           | •           | •           | •     |           | •       | •       | k                  |
| ST 72-761 SAT                          | 13    | _     | _           | _           | _           | •     | •         |         |         | k                  |
| ST 72-762 TOP                          | 13    |       | _           |             | _           | •     | 18        | •       | •       | k                  |
| ST 72-762/9 TOP                        | •     | •     | •           | •           | •           | •     | 18        | •       | •       | k                  |
| M 72-115 IDTV                          | •     | 10    | 10          | 10          | 10          | •     |           | •       | •       | k                  |
| M 72-215 IDTV/Referenz                 |       | 10    | 10          | 10          | 10          | •     |           |         |         | k                  |
| M 72-215/9 IDTV/PIP/Referenz           | •     | •     | •           | •           | •           | •     | _         | •       | •       | k                  |
| E 72-170 IDTV Elegance                 | •     | 10    | 10          | 10          | 10          | •     |           | •       | •       | k                  |
| E 72-911 DPL/IDTV                      | •     | •     | •           | •           | •           | •     |           | •       | •       | k                  |
| M 82-115/9 IDTV/PIP                    | •     | •     | •           | •           | •           | •     | _         | •       | •       | k                  |
|  | 1     |       | ı l         | l.          | ı           |       | · I       | l       | l       | ı                  |

<sup>1)</sup> NTSC 4.43 MHz 2) NTSC 3.58 MHz only via AV 3) no 4.5 MHz sound 4) no NTSC 3.58 MHz

2.42 Grundig Service

to establish the number code

**Continuation of Table 1** 

Colour TV

XS 55/1

XS 55/9 XS 63/2

Series 1995/96

M 82-169/9 IDTV

ST 84-796/9 TOP/LOG

SP 737 text GREENVILLE 37

T 5574 TOP GREENVILLE 55

ST 763 TOP COPENHAGEN

ST 1770 TOP GREENVILLE 70 SE 7088 IDTV

ST 770/9 TOP HAMBURG

M 95-115/9 IDTV/PIP

ST 170 IDTV Boston

Head-

phone

Socket

k = 3.5

K = 6.3

k

k

k

k

k

k

k

k

k

Video+

Audio

Cinch

| F | ١ | į |  |
|---|---|---|--|

Grundig Service 2.43

NTSC

Sound

4.5 MHz

Norm

Μ

•

•

•

10

10

Secam

West

2)

Norm

•

•

•

10

10

Secam

East

Norm

B/G

•

•

•

13

•

•

13

•

GB

Sound

6.0 MHz

Norm

•

•

•

10

10

OIRT

Sound

6.5 MHz

Norm

D/K/K'

10

10

Tele-

text

SAT

Reception

18

17

18

18

S-VHS

Hosiden

or Euro-AV

•

| Continuation of Table 1                     | Secam | Secam | NTSC    | GB      | OIRT     | Tele-    | SAT                                    | S-VHS   | Video+ | Head-   |
|---|-------|-------|---------|---------|----------|----------|--|---------|--------|---------|
| to establish the number code                | East  | West  | Sound   | Sound   | Sound    | text     | Reception                              | Hosiden | Audio  | phone   |
|   |       | 2)    | 4.5 MHz | 6.0 MHz | 6.5 MHz  |          | •                                      | or      | Cinch  | Socket  |
|   |       |       |         |         |          |          |  | Euro-AV |        | k = 3.5 |
| Colour TV                                   |       |       |         |         |          |          |  | Luio-Av |        |         |
| Colour TV                                   | Norm  | Norm  | Norm    | Norm    | Norm     |          |  |         |        | K = 6.3 |
| Series 1996/97                              | B/G   | L     | М       | I       | D/K/K′   |          |  |         |        |         |
| P 37-065/5                                  | •     | _     | 1)3)4)  |         | •        |          |  |         |        |         |
| P 37-071                                    | _     | _     | _       | _       | _        | _        | _                                      | _       | _      | _       |
| P 37-731 text                               | _     | _     | _       |         |          | •        |  |         | _      | k       |
| P 37-731/12 text                            | •     | •     | _       | _       | _        | •        | _                                      | _       | _      | _       |
| P 37-843 a FR<br>P 45-731 text              | •     | •     | _       | •       | _        | •        | _                                      | _       | _      |         |
| T 51-070                                    | _     | _     | _       | _       | _        |          | _                                      | _       | _      | k       |
| T 51-771 text                               | _     | _     | _       | _       | _        | <u> </u> | _                                      | _       | _      | _       |
| T 51-731 text                               | •     | _     | 1)2)4)  | _       | <u> </u> |          | _                                      | _       | _      | _       |
| T 55-731 text                               |       |       | 1)3)4)  | _       |          | •        | _                                      | _       | _      | k       |
| T 55-732/5 text                             | -     | _     | 1)3)4)  | _       | •        | •        | _                                      | _       | _      | k       |
| T 55-843 FR                                 |       | •     | 1)3)4)  | •       |          |          |  |         |        |         |
| ST 55-876/9 text                            |       |       | •       | •       | •        | -        |  | •       | •      | k       |
| ST 55-95 ECO                                | Ť     |       |         |         |          | •        |  | •       |        | k       |
| M 61-1690 TOP/LOG                           | -     | •     | •       | •       | •        | •        | 18                                     | •       | •      | k       |
| M 63-280 IDTV/LOG                           |       | _     | 1)3)4)  | _       | _        | •        | 19                                     | •       | •      | k       |
| M 63-280/8 IDTV/LOG                         | •     | •     | 1)2)3)  | •       | •        | •        | 19                                     | •       | •      | k       |
| ST 63-160 a IDTV                            | •     | 10    | 10      | 10      | 10       | •        | _                                      | •       | •      | k       |
| ST 63-255 IDTV/LOG                          | •     | _     | 1)3)4)  | _       | _        | •        | 19                                     | •       | •      | k       |
| ST 63-255/8 IDTV/LOG                        | •     | •     | 1)2)3)  | •       | •        | •        | 19                                     | •       | •      | k       |
| ST 63-720/8 text                            | •     | •     | _       | •       | •        | •        | _                                      | _       | •      | k       |
| ST 63-725/8 text                            | •     | •     | _       | •       | •        | •        | _                                      | _       | •      | k       |
| ST 63-800 TOP/LOG                           | 13    | _     | 1)3)4)  | _       | _        | •        | 18                                     | •       | •      | k       |
| ST 63-800/9 TOP/LOG                         | •     | •     | •       | •       | •        | •        | 18                                     | •       | •      | k       |
| ST 70-255 IDTV/LOG                          | •     | _     | 1)3)4)  | _       | _        | •        | 19                                     | •       | •      | k       |
| ST 70-255/8 IDTV/LOG                        | •     | •     | 1)2)3)  | •       | •        | •        | 19                                     | •       | •      | k       |
| ST 70-705/8 text                            | •     | •     | _       | •       | •        | •        | _                                      | _       | •      | k       |
| ST 70-705/9 TOP/LOG                         | •     | •     | •       | •       | •        | •        | 18                                     | •       | •      | k       |
| ST 70-720/8 text                            | •     | •     | _       | •       | •        | •        |  |         | •      | k       |
| ST 70-725/8 text                            | •     | •     | _       | •       | •        | •        | _                                      | _       | •      | k       |
| ST 70-728 text                              |       | _     | _       |         | _        | •        |  | _       |        | k       |
| ST 70-755/9 DPL/LOG                         | •     | •     | •       | •       | •        | •        | 18                                     | •       | •      | k       |
| ST 70-760 TOP/LOG                           | 13    | _     | 1)3)4)  | •       | •        | •        | 18                                     | •       | •      | k       |
| ST 70-800 TOP/LOG                           | 13    | _     | 1)3)4)  | •       | •        | •        | 18                                     | •       | •      | k       |
| ST 70-800/9 TOP/LOG<br>ST 70-869 IDTV       | •     | •     | ()()()  | •       | •        | •        | 18                                     | •       | •      | k       |
| T 70-843 FR                                 | •     | •     | 1)2)3)  | •       | •        | •        | 19                                     | •       | •      | k       |
|   | •     | •     | _       | •       | •        | _        | _                                      | _       | _      | k       |
| M 70-1690 DPL/IDTV/LOG<br>M 70-1690 TOP/LOG |       | •     |         |         |          |          | 18                                     |         | •      | k<br>k  |
| M 70-1690 TOP/LOG<br>M 70-269 PALplus/LOG   |       |       |         |         | •        | -        |  |         | •      |         |
| M 70-269 PALPIUS/LOG<br>M 70-269/9 Referenz |       | •     | •       |         | •        | •        | 20                                     |         | •      | k<br>k  |
| M 70-289/9 Referenz                         |       |       | 1)3)4)  |         | •        | -        | 19                                     |         |        | k<br>k  |
| M 70-280/8 IDTV/LOG                         |       | •     | 1)3)4)  | •       | •        |          | 19                                     |         | •      | k<br>k  |
| ST 72-261 IDTV/LOG                          |       |       | 1)2)3)  |         |          | -        | 19                                     | •       |        | k       |
| ST 72-261/8 IDTV/LOG                        |       | •     | 1)2)3)  | •       | •        | •        | 19                                     |         | •      | k       |
| ST 72-760 text                              |       |       |         |         |          | •        | —————————————————————————————————————— |         | •      | k       |
| ST 72-760/8 text                            | •     | •     | _       | •       | •        |          |  |         |        | k       |

<sup>1)</sup> NTSC 4.43 MHz 2) NTSC 3.58 MHz only via AV 3) no 4.5 MHz sound 4) no NTSC 3.58 MHz

2.44 Grundig Service

| F | ١ | į |  |
|---|---|---|--|

| Continuation of Table 1       | Secam | Secam | NTSC    | GB      | OIRT    | Tele- | SAT       | S-VHS     | Video+ | Head-   |
|-------------------------------|-------|-------|---------|---------|---------|-------|-----------|-----------|--------|---------|
| to establish the number code  | East  | West  | Sound   | Sound   | Sound   | text  | Reception | Hosiden   | Audio  | phone   |
|                               |       | 2)    | 4.5 MHz | 6.0 MHz | 6.5 MHz |       |           | or        | Cinch  | Socket  |
|                               |       | ,     |         |         |         |       |           | Euro-AV   |        | k = 3.5 |
| Colour TV                     | Norm  | Norm  | Norm    | Norm    | Norm    |       |           | Luio / tv |        | K = 6.3 |
| Series 1996/97                | B/G   | L     | М       | ı       | D/K/K′  |       |           |           |        |         |
| M 72-315/9 IDTV/PIP/Referenz  | •     | •     | •       | •       | •       | •     | _         | •         | •      | k       |
| M 72-315 IDTV/Referenz        | •     | 10    | 10      | 10      | 10      | •     | _         | •         | •      | k       |
| M 82-169 a PALplus            | •     | •     | •       | •       | •       | •     | _         | •         | •      | k       |
| M 82-1690/9 TOP/LOG           | •     | •     | •       | •       | •       | •     | 18        | •         | •      | k       |
| M 82-269 PALplus/LOG          | •     | •     | •       | •       | •       | •     | 20        | •         | •      | k       |
| M 82-269/9 Reference          | •     | •     | •       | •       | •       | •     | 20        | •         | •      | k       |
| M 84-410/8 IDTV/LOG           | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •         | •      | k       |
| M 95-410/90 Referenz/PIP      | •     | •     | •       | •       | •       | •     | 20        | •         | •      | k       |
| DENVER SE 8216/9 PIP/Referenz | •     | •     | •       | •       | •       | •     | 20        | •         | •      | k       |
| ATLANTA SE 7289 IDTV/LOG      | •     | _     | 1)3)4)  |         | _       | •     | 19        | •         | •      | k       |
| BERLIN SE 7290 IDTV/LOG       | •     | 10    | 10      | 10      | 10      | •     | _         | •         | •      | k       |
| BOSTON ST 270 IDTV/LOG        | •     | _     | 1)3)4)  | _       | _       | •     | 19        | •         | •      | k       |
| BOSTON ST 270/8 IDTV/LOG      | •     | •     | 1)2)3)  | •       | •       | •     | 19        | •         | •      | k       |
| TRENTO SE 7016/9 PIP/Referenz | •     | •     | •       | •       | •       | •     | 20        | •         | •      | k       |
| COPENHAGEN ST 763 TOP/LOG     | 13    | _     | 1)2)3)  |         | _       | •     | 18        | •         | •      | k       |
| GREENVILLE 7002 text          | _     | _     | _       |         | _       | •     | _         | _         | •      | k       |
| GREENVILLE 7002/8 text        | •     | •     | _       | •       | •       | •     | _         | _         | •      | k       |
| LISSABON SE 5576 text         | _     | _     | 1)3)4)  |         | _       | •     | _         | •         | •      | k       |
| SYDNEY ST 872/8 text          | •     | •     | _       | •       | •       | •     | _         | _         | •      | k       |
| SE 6376 TOP/LOG               | 13    | _     | 1)2)3)  | _       | _       | •     | 18        | •         | •      | k       |
| SE 7089 IDTV/LOG              | •     | _     | 1)3)4)  | _       | _       | •     | 19        | •         | •      | k       |
| XS 63/81                      | •     | •     | _       | •       | •       | •     | _         | _         | _      | k       |
| XS 70/81                      | •     | •     | _       | •       | •       | •     | I —       | _         | _      | k       |

<sup>1)</sup> NTSC 4.43 MHz 2) NTSC 3.58 MHz only via AV 3) no 4.5 MHz sound 4) no NTSC 3.58 MHz

| Continuation of Table 1      | Secam | Secam | NTSC    | GB      | OIRT    | Tele- | SAT       | S-VHS   | Video+ | Head-   |
|------------------------------|-------|-------|---------|---------|---------|-------|-----------|---------|--------|---------|
| to establish the number code | East  | West  | Sound   | Sound   | Sound   | text  | Reception | Hosiden | Audio  | phone   |
|                              |       | 5)    | 4.5 MHz | 6.0 MHz | 6.5 MHz |       |           | or      | Cinch  | Socket  |
|                              |       | ,     |         |         |         |       |           | Euro-AV |        | k = 3.5 |
| Colour TV                    | Norm  | Norm  | Norm    | Norm    | Norm    |       |           |         |        | K = 6.3 |
| Series 1997/98               | B/G   | L     | М       | ı       | D/K/K′  |       |           |         |        |         |
| P 37-732/5 text              | •     | -     | 1)3)4)  | -       | •       | •     | -         | -       | -      | -       |
| T 51-071                     | -     | -     | -       | -       | -       | -     | -         | -       | -      | -       |
| M 55-280/8 IDTV/LOG          | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •       | •      | k       |
| ST 55-800 a text             | -     | -     | 1)3)4)  | -       | -       | •     | 21        | •       | •      | k       |
| ST 55-800 NIC/TOP            | -     | -     | 1)3)4)  | •       | •       | •     | 21        | •       | •      | k       |
| ST 55-800 text               | -     | -     | 1)3)4)  | -       | -       | •     | -         | •       | •      | k       |
| ST 55-800/9 text             | •     | •     | •       | •       | •       | •     | -         | •       | •      | k       |
| ST 63-700 NIC/TOP            | -     | -     | -       | •       | •       | •     | -         | •       | •      | k       |
| ST 63-700 text               | -     | -     | -       | -       | -       | •     | -         | •       | •      | k       |
| ST 63-780 NIC/TOP            | -     | -     | -       | •       | •       | •     | -         | •       | •      | k       |
| ST 63-780 text               | -     | -     | -       | -       | -       | •     | -         | •       | •      | k       |
| ST 63-700 FR/TOP             | •     | •     | 1)3)4)  | •       | -       | •     | -         | •       | •      | k       |
| M 63-281 IDTV/LOG            | •     | -     | 1)3)4)  | -       | -       | •     | 20        | •       | •      | k       |
| M 63-281/8 IDTV/LOG          | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •       | •      | k       |
| M 70-281 IDTV/LOG            | •     | -     | 1)3)4)  | -       | -       | •     | 20        | •       | •      | k       |
| M 70-281/8 IDTV/LOG          | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •       | •      | k       |
| ST 70-270 IDTV               | •     | -     | 1)3)4)  | _       | -       | •     | 20        | •       | •      | k       |
| ST 70-270/8 IDTV             | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •       | •      | k       |
| ST 70-700 DPL/NIC/FT         | -     | -     | _       | •       | •       | •     | -         | •       | •      | k       |
| ST 70-700 FR/TOP             | •     | •     | 1)3)4)  | •       | -       | •     | -         | •       | •      | k       |
| ST 70-700 NIC/TOP            | _     | -     | _       | •       | •       | •     | -         | •       | •      | k       |
| ST 70-700 text               | -     | -     | -       | -       | -       | •     | -         | •       | •      | k       |
| ST 70-770 text               | -     | -     | -       | -       | -       | •     | -         | -       | •      | k       |
| ST 70-778 text               | -     | -     | -       | -       | -       | •     | -         | -       | •      | k       |
| ST 70-780 FR/TOP             | •     | •     | 1)3)4)  | •       | _       | •     | -         | •       | •      | k       |
| ST 70-780 NIC/TOP            | -     | -     | -       | •       | •       | •     | -         | •       | •      | k       |
| ST 70-780 text               | -     | -     | -       | -       | -       | •     | -         | •       | •      | k       |
| ST 70-97 IDTV                | •     | -     | 1)3)4)  | -       | -       | •     | 20        | •       | •      | k       |
| MW 70-100/8                  | •     | •     | 1)2)3)  | •       | •       | •     | 20        | •       | •      | k       |
| MW 70-269 PAL PLUS           | •     | 22    | 22      | 22      | 22      | •     | 20        | •       | •      | k       |
| M 72-100                     | •     | -     | 1)3)4)  | -       | -       | •     | 20        | •       | •      | k       |
| M 72-100/8                   | •     | •     | 1)2)3)  | •       | •       | •     | 21        | •       | •      | k       |
| M 72-270 IDTV/LOG Elegance   | •     | -     | 1)3)4)  | _       | _       | •     | 20        | •       | •      | k       |
| M 72-410 Reference           | •     | 22    | 22      | 22      | 22      | •     | 20        | •       | •      | k       |
| M 72-410 Reference/PIP       | •     | 22    | 22      | 22      | 22      | •     | 20        | •       | •      | k       |
| M 72-410/9 Reference         | •     | •     | •       | •       | •       | •     | 20        | •       | •      | k       |
| ST 72-860 FR/TOP             | •     | •     | 1)3)4)  | •       | _       | •     | _         | •       | •      | k       |
| ST 72-860 NIC/TOP            | -     | -     | 1)3)4)  | •       | •       | •     | -         | •       | •      | k       |
| ST 72-860 TOP                | _     | _     | 1)3)4)  | -       | -       | •     | -         | •       | •      | k       |
| ST 72-865 NIC/TOP            | -     | -     | 1)3)4)  | •       | •       | •     | -         | •       | •      | k       |
| MW 82-100/9                  | •     | •     | •       | •       | •       | •     | 20        | •       | •      | k       |
| MW 82-100/9 PAL PLUS         | •     | •     | •       | •       | •       | •     | 20        | •       | •      | k       |
| MW 82-2690 NIC/TOP           | -     | -     | 1)3)4)  | •       | •       | •     | 21        | •       | •      | k       |
| M 95-410/9 a Reference/PIP   | •     | •     | •       | •       | •       | •     | 20        | •       | •      | k       |

<sup>1)</sup> NTSC 4.43 MHz 2) NTSC 3.58 MHz only via AV 3) no 4.5 MHz sound 4) no NTSC 3.58 MHz 5) with models /8 no reception of French Band I

| т | ١. | 1 |
|---|----|---|
| ш | ١  | , |
|   |    |   |
|   |    |   |

| Continuation of Table 1 to establish the number code | Secam<br>East | Secam<br>West | NTSC<br>Sound | GB<br>Sound | OIRT<br>Sound | Tele-<br>text | SAT<br>Reception | S-VHS<br>Hosiden | Video+<br>Audio | Head-<br>phone |   |
|--|---------------|---------------|---------------|-------------|---------------|---------------|------------------|------------------|-----------------|----------------|---|
| to obtablion the maniper doub                        | Last          | 5)            | 4.5 MHz       | 6.0 MHz     | 6.5 MHz       | ιολι          | rtocoption       | or               | Cinch           | Socket         | ı |
|  |               | - /           |               |             |               |               |                  | Euro-AV          |                 | k = 3.5        | ı |
| Colour TV  | Norm          | Norm          | Norm          | Norm        | Norm          |               |                  |                  |                 | K = 6.3        | ı |
| Series 1997/98                                       | B/G           | L             | М             | 1           | D/K/K′        |               |                  |                  |                 |                | ı |
| Atlanta SE 7220 a IDTV/LOG                           | •             | -             | 1)3)4)        | -           | -             | •             | 20               | •                | •               | k              | ı |
| Atlanta SE 7220 IDTV/LOG                             | •             | -             | 1)3)4)        | -           | -             | •             | 20               | •                | •               | k              | ı |
| Berlin SE 70-100/8                                   | •             | •             | 1)2)3)        | •           | •             | •             | 20               | •                | •               | k              | ı |
| Boston SE 7090 IDTV/LOG                              | •             | -             | 1)3)4)        | -           | -             | •             | 20               | •                | •               | k              | ı |
| Boston SE 7090/8 IDTV/LOG                            | •             | •             | 1)2)3)        | •           | •             | •             | 20               | •                | •               | k              | l |
| Denver SE 82-100 PAL PLUS                            | •             | •             | •             | •           | •             | •             | 20               | •                | •               | k              | l |
| Denver SE 8216/9 PAL PLUS                            | •             | •             | •             | •           | •             | •             | 20               | •                | •               | k              | l |
| Greenville 7003 NIC/TOP                              | -             | -             | -             | •           | •             | •             | -                | •                | •               | k              | l |
| Greenville 7003 text                                 | -             | -             | -             | -           | -             | •             | -                | •                | •               | k              | ı |
| Melbourne SE 7210 NIC/TOP                            | -             | -             | 1)3)4)        | •           | •             | •             | -                | •                | •               | k              | ı |
| Melbourne SE 7210 TOP                                | -             | -             | 1)3)4)        | -           | -             | •             | -                | •                | •               | k              | ı |
| Sydney 100 SE 7020 IDTV/LOG                          | •             | -             | 1)3)4)        | -           | -             | •             | 20               | •                | •               | k              | l |
| Sydney 100/8 SE 7020/8 IDTV/LOG                      | •             | •             | 1)2)3)        | •           | •             | •             | 20               | •                | •               | k              | ı |
| Trento SE 7026 PAL PLUS                              | •             | 22            | 22            | 22          | 22            | •             | 20               | •                | •               | k              | ı |
| Wien 100 SE 6320 IDTV/LOG                            | •             | -             | 1)3)4)        | -           | -             | •             | 20               | •                | •               | k              | ı |

<sup>1)</sup> NTSC 4.43 MHz 2) NTSC 3.58 MHz only via AV 3) no 4.5 MHz sound 4) no NTSC 3.58 MHz 5) with models /8 no reception of French Band I

# Table 2 / Number Code Allocation (from Table 1) - Required Material - Redundant Modules

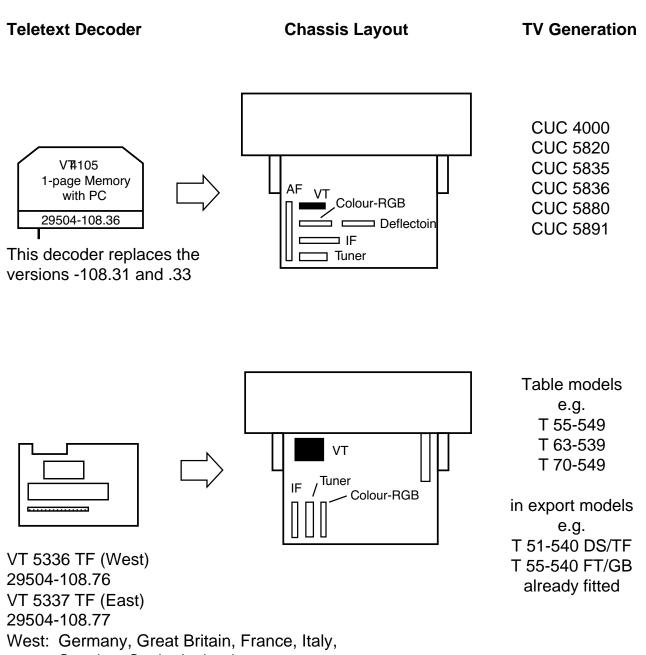
| Number | For conversion necessary adapters,                   | Redundant modules (base model)  |
|--------|--|---------------------------------|
| code   | kits and modules                                     | (1111)                          |
| 1      | Audio module 6.0 MHz, BFBS-Norm 1)                   |                                 |
| 2      | Audio module 6.5 MHz, OIRT-Norm 1)                   |                                 |
| 3      | Audio module 4.5 MHz, AFN-Norm 1)                    |                                 |
| 4      | Colour/RGB 29504-105.28                              | Colour/RGB 29504-105.14         |
| 5      | Colour/RGB 29504-105.51/.52/.54                      | Colour/RGB 29504-105.49/.50     |
| 6      | Audio module 6.5 MHz (see number code 2)             | Colour/RGB 29504-105.50         |
|        | + Colour/RGB 29504-105.51/.52                        |                                 |
|        | VT 5336 (West) G.AV 7800 (29504-108.76)              |                                 |
| 7      | or   |                                 |
|        | VT 5337 (East) G.AV 7900 (29504-108.77)              |                                 |
|        | IF 29504-162.17                                      | IF 29504-102.17                 |
|        | + Colour/RGB 29504-165.51/.52/.54                    | Colour/RGB 29504-105.50/.51/.52 |
| 8      | + Control Processor (IC 811)                         | SDA 20561 A008 or lower         |
|        | SDA 20561 A009 or equivalent,                        |                                 |
|        | part no. 8305-157-561                                |                                 |
| 9      | VT 5436 G.AX 03-00 (29504-108.83)                    |                                 |
|        | IF 29504-162.43/.46                                  | IF 29504-102.33                 |
| 10     | Connecting cable IF/Display unit "IM"                |                                 |
|        | part no. 29200-233.41                                |                                 |
|        | IF 29504-162.44                                      | IF 29504-102.14                 |
| 44     |  |                                 |
| 11     | Connecting cable IF/Display unit (main chassis) "NI" |                                 |
|        | part no. 29210-234.22                                |                                 |
| 12 2)  | IF 29504-182.25                                      | 29504-102.25                    |
| 13     | Colour-Sync module 29504-165.67                      | 29504-105.56                    |
| 14     | VT 6301 G.AY 1400 (29504-108.39)                     |                                 |
| 15     | IF 29504-112.25                                      | IF 29504-102.25                 |
| 16 2)  | IF 29504-182.25                                      | IF 29504-102.25                 |
|        | + Colour/RGB 29504-105.28                            | Colour/RGB 29504-105.15         |
| 17     | SER 7300 G.AX 7300 (29504-106.23)                    |                                 |
| 18     | SER 6350 G.AX 8200 (29504-106.22)                    |                                 |
|        | SER 150 G.AY 4900 (for models with EPROM             |                                 |
|        | version number higher than .09)                      |                                 |
| 19     | SAT module 29504-106.24                              |                                 |
|        | SER 151 G.AC 2600 (for models with EPROM             |                                 |
|        | version number lower than .10)                       |                                 |
|        | SAT module 29504-106.24                              |                                 |
| 20     | SER 150 G.AY 4900 (29504-106.24)                     |                                 |
| 21     | Micro Sat Receiver can be integrated externally      |                                 |
| 22     | Signal module 29504-162.35                           | 29504-102.35                    |

<sup>1)</sup> The audio modules are not included in the range of GRUNDIG accessories. They can be obtained for example from company Haas, Holzgasse 22, D-64380 Rossdorf, phone ++49 6154/9437.

An additional single-pole switch (ON/OFF) can be used to switch over between 5.5 and 6.5 MHz sound-IF.

2.48 Grundig Service

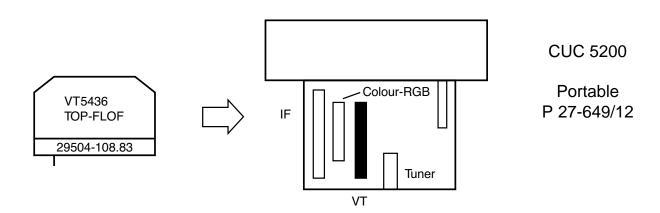
<sup>2)</sup> Apply an operating voltage of +8 - 12V (e.g. +B') to IF-contact 15 on the main chassis.



Sweden, Spain, Iceland

East: Germany, former Yugoslavia, Poland, Rumania,

Sweden, Czech Republic, Slovakia



#### **Built-in Satellite Receiver SER 7300**

Order No. **GAX 8300**, for colour television receivers fitted with the Chassis CUC 73xx Consisting of: 1 SAT Module 29504-106.23, 1 Plug-in Connecting Cable, 2-core, 29210-212.72

1 Plug-in Connecting Cable, 3-core 29210-603.41,

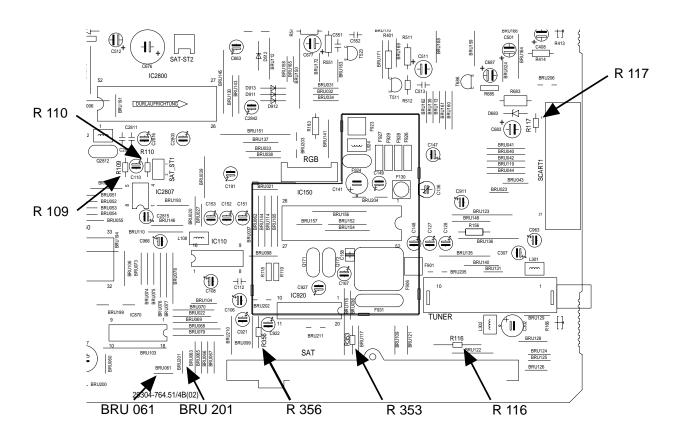
1 Module Holder 29700-616.01

### **Fitting Instructions:**

- Disconnect the mains plug and open the TV set.
- Remove the socket cover. Remove the dummy plug for the SAT aerial connection and the support at the side of the socket cover.
- Disconnect the following resistors at one side: R 109, R 110, R 116, R 117, and R 353. In French versions of the Chassis CUC 73xx F the resistor R 356 must be disconnected (R 353 is not fitted to this chassis).
- Fit the SAT module and the module holder.
- Connect the SAT module with the cables included in the delivery ("SAT-ST1" and "SAT-ST2") to the chassis.
- To optimize the sound quality it may be necessary in individual cases to connect the solder pads at the positions BRU 061 and BRU 201 to ground.

If the TV receiver is operated again without the SAT module the resistors mentioned above must be re-connected.

When switching on, select via the Language menu -> Country -> Cable/Aerial -> "Satellite" with OK. On selection of the desired satellite the correct oscillator frequency will be set automatically and the automatic tuning system will start. The programmes will be allocated in the order pre-programmed in the SAT module and will then be stored automatically.



#### TV

#### **Built-in Satellite Receiver SER 6350**

Order No. **GAX 8200**, for colour television receivers fitted with the Chassis CUC 6360, 6365, 6460

Consisting of: 1 SAT Module 29504-106.22

1 Plug-in Connecting Cable 29210-214.32

# **Fitting Instructions:**

- Disconnect the mains plug and open the TV set.
- Insert the SAT module in the place reserved for it.
- Connect the 4-core plug-in connecting cable between the SAT module ("SAT 1" socket) <-> and the tuning module ("SAT 1" socket).

#### Built-in Satellite Receivers SER 150 / SER 151 E

SER 150, order no. **G.AY 4900**, for TV chassis CUC 1825/1826 (Digi Basic), EPROM version number index ≥ .10 and for TV chassis CUC 1827 (Digi Basic+), 1952/1983/1984 (Digi 6)

SER 151 E, order no. **G.AC 2600**, for TV chassis CUC 1825/1826, EPROM version number index <.10

## Calling up the version number with the remote control buttons:

"i"--> "Dialog Center" --> "OK" --> "AUX"

The SER 150 receiver consists of: SAT Module 29504-106.24, positioning device 29700-216.01

The SER 151 E receiver consists of: SAT Module 29504-106.24, positioning device 29700-216.01, EPROM part no. 19798-300.10

## **Assembly Digi Basic:**

- Disconnect the mains plug and open the TV set.
- Lift the 2 catches above the Scart sockets and hinge away the socket cover.
- Break off the prepunched dummy plug for SAT aerial connection on the socket cover.
- Detach the module holder and pinch off the 3 holding lugs.
- Insert the SAT Module into the Signal Module and lock the module holder into place.
- Attach the socket cover and lock it into place.
   Take care that the chassis board fits into the groove at the lower edge of the cover.
- Fasten the SAT Module with the module positioning device.
- Only SER 151 E: Replace EPROM IC 80060 (27C020-15NS) on the chassis board. Refit the rear of the cabinet and connect the TV set.
- Switch on the TV set (ATS menu), select "Adjust language on screen" --> "Adjust country --> Cable/Aerial" --> and confirm the desired satellite with "OK".

  After the selection of the satellite, the correct oscillator frequency will be set automatically and the automatic tuning system will start. The programmes are allocated in the order preprogrammed in the SAT module and are then stored automatically.

## **Assembly Digi 6:**

- Disconnect the mains plug and open the TV set.
- Undo 2 screws at the lower edge of the socket cover and hinge away the cover.
- Break off the prepunched dummy plug for SAT aerial connection on the socket cover.
- Insert the SAT Module into the Signal Module.
- Attach the socket cover and fasten it with the screws.
- Fasten the SAT Module with the module positioning device.
- Refit the rear of the cabinet and connect the TV set.
- Switch on the TV set (ATS menu), select "Adjust language on screen" --> "Adjust country --> Cable/Aerial" --> and confirm the desired satellite with "OK". After the selection of the satellite, the correct oscillator frequency will be set automatically and the automatic tuning system will start. The programmes are allocated in the order preprogrammed in the SAT module and are then stored automatically.

T\/

# Special Functions (Options) of Colour Television Receivers - Table 1

Each of the functions below is listed with a number code which is used with the TV receiver model or type of chassis to establish the necessary sequence of operations from Table 2 on the following pages for activating or cancelling the respective function.

| Special Function (Option)  | Code No. |
|--|----------|
| <b>Single-digit programme indication</b> 1-9 (no effect on AV positions). The short-time flashing of the programme indication after having changed the programme is omitted.   | 1        |
| Station ident (abbreviated station name) display: off/ short-time after changing the programme/ continuous   | 2        |
| Switching on with "AV" ("1 AV").   | 3        |
| French cable channel spacing. For operation of a TV, multi-norm or converted to norm L, in a French cable installation the receiver must be adjusted to the different French cable channel spacing.  | 4        |
| French Band I channels with + 6.5 MHz sound carrier. Reception of a French Band I channel (- 6.5 MHz sound carrier) which is converted to a CCIR Band I channel (+ 6.5 MHz sound carrier) with a TV operated in a cable installation.                                | 5        |
| <b>Default values (emergency data set).</b> Loading of average values for brightness, volume, contrast, TINT, picture geometry etc. if the stored analogue values are lost.  | 6        |
| Dealer Automatic Programming with IR-Data-Programmer IDP 2   | 7        |
| <b>Sleep function</b> Cancelling the Sleep function which is activated approx. 10 minutes after the end of the TV programme, at the end of the tape or after any signal failure. This option cannot be stored but must be programmed whenever the TV is switched on. | 8        |
| Limitation of the programme positions when stepping through with "P +".  | 9        |
| <b>Hotel Mode</b> for limiting the maximum possible volume level and for disabling the functions: channel mode (P/C), store (M), automatic station search (ATS) and the menu for setting the receiver.   | 10       |
| Child lock (switch-on lock/programme lock/electronic combination lock)   | 11       |
| No display of the bars when setting the volume, contrast and brightness ("OSD OFF").   | 12       |
| Peaking Changing the picture sharpness.  | 13       |
| continued on poyt page:  |          |

continued on next page:

| Special Function (Option)  | Code No. |
|--|----------|
| Luminance delay correction (changing the Y-delay).   | 14       |
| Software status (calling up the EPROM version number).   | 15       |
| PIP settings   | 16       |
| Forced PAL/Secam/NTSC at 50 or 60 Hz.  | 17       |
| OSD position (horizontal shifting of the display on the screen)  | 18       |
| ATS / Auto Tuning System (starting the automatic station search).  | 19       |
| Switching the HIFI-MODE to linear/ controlled  | 20       |
| Changing the menu language   | 21       |
| Setting the <b>AV time constant</b> in Peri mode (e.g. Peri decimal point is set)  | 22       |
| Setting the <b>Peri bit</b> (decimal point). Example: "P. 1". Important for Premiere Decoder for example.  | 23       |
| Changing over from the forced 60 Hz field deflection frequency on a per-programme basis to 50 Hz with CUC 5301 and 5310 fitted with the earlier processor ZC (XC) 88604. If 60 Hz has been entered inadvertently on a programme position, the picture will not synchronise with 50 Hz signals (fast slipping picture).   | 24       |
| Forced mono storable on a per-programme basis  | 25       |
| White level correction   | 26       |
| <b>Entering default values</b> on TV's fitted with CUC 5350/5360: setting the default OSD position, cancelling the child lock and Hotel mode. On TV's fitted with the SDA 20563 processor, the volume offsets entered in individual programme positions are additionally cancelled in all rogramme positions 1-49, the volume is set to mid-position. This option is particularly important on replacement of a memory-IC. | 27       |
| ATS Reset This option starts the automatic station search the next time the TV is switched on via the menus Language -> Country -> Cable/Aerial or Satellite (only with SAT module) and "OK".  | 28       |
| Switching off the blue screen background   | 29       |
| Deactivating the eco mains switch  | 30       |
| Activating/deactivating the <b>Demo Mode</b>   | 31       |

Further special functions:

### **Table 2** for establishing the sequence of operations (activating/cancelling)

We distinguish between 11 groups of chassis which are designated letters A to K:

A: Models with CUC 5301/5303/5305/5310/5350/5360/5361/5370/5371/5500/5511

B: Models with CUC 7851/7880/7890/7951

C: Models with CUC 1800/1821/1822/1824/1851/1852/1881/1892 (Digi 4/5)

D: Models with CUC 6300/6301/6310

E: Models with CUC 6360/6365/6380/6450/6460/6469

F: Models with CUC 7300/7302

G: Models with CUC 6330/6331/7350

H: Models with CUC 7301

I: Models with CUC 1805/1825/1826/1827 (Digi Basic)

J: Models with CUC 1842/1894/1952/1962/1983/1984 (Digi 6)

K: Models with CUC 7303/7305

| Code<br>No. | Models<br>Group      | Sequence of Operations  |
|-------------|----------------------|---|
| 1           | A to C               | See operating instructions. The user is guided by the menu.   |
|             | <b>D</b> to <b>J</b> | Enter channel "C00" on programme position "10".   |
|             | A/B/D                | "OFF" via "OSD OFF" (menu guide), "continuous" via Telepilot button "i".  |
| 2           | С                    | Menu guide: "i", "Special Functions", "Settings", "Station Ident short - continuous* - off".  * only models without separate display outside the screen   |
|             | B/C                  | Menu guide: "i", "Special Functions", "Service", "Switch on with".  |
| 3           | E                    | Menu guide: "i", "Special Functions", "Settings", "Switch on with"  |
|             | I/J                  | Menu guide: "i", "Dialog Center", "Special Functions", "Switch on with"   |
|             | A/D                  | Menu guide: "Programmes" 4th position ("S").  |
| 4           | C/E/F/I/J            | Under the ATS menu item "Adjust country", select "F".   |
|             | G                    | Only multi-norm TV's: Select "FR ON" under the ATS menu.  |
| 5           | <b>A</b> to <b>I</b> | In "Norm1" and Band I, the TV receiver - multi-norm or converted to Norm L - switches to the -6.5 MHz sound carrier when entering a channel between 1 and 4. For a French channel converted to +6.5 MHz, the channel numbers C81 to C84 must be entered. In these channels, the sound carrier is not changed to -6.5 MHz. Use the finetuning function if necessary. |
| 6           | С                    | Loading the picture geometry default values: Menu guide: "i", "Special Functions", "Service", "code number 8500", "Geometry"  |
|             |                      | continued on next page  |

continued on next page

| Code<br>No. | Models<br>Group | Sequence of Operations   |
|-------------|-----------------|--|
| 6           | B/C/J           | Depress and hold the "P -" button down while switching on with the mains button. Hold the button until the indication appears.   |
|             | A/D/E/<br>F     | Sub-menu "SPECIAL FUNCTION", "PROGRAMMER HP", "OK" button on the remote control handset.   |
| 7           | B/C             | Sub-menu "Special Functions" and "IR-Data Programmer".   |
| ,           | G               | Depress and hold the "i" button down while switching on with the mains button. Select "Programmer HP" on the menu and confirm with "OK".   |
|             | I/J             | Menu guide: "i", "Dialog Center", "Service" (only models with SAT module)  |
| 8           | A to C          | Operating the TV in channel mode (display shows "C06" for example).  |
| 9           | A to G<br>I/J/K | Store channel "C00" in the programme position which shall no longer be selectable (models of group K - band selection "").   |
|             | А               | Depress and hold down the "P/C" button on the remote control while switching the TV on with the mains button. In menu "VOLUME M" set the desired maximum volume level, confirm with "OK" and press button "i". Cancelling the Hotel mode: Repeat the steps above but enter the maximum volume level possible.  |
| 10          | D/E/G/<br>H/K   | Depress and hold button "i" ("P/C" for models of group F) on the remote control while switching on with the mains button. In the menu line "HOTEL" select "ON" and leave the menu with button "i". Cancelling the Hotel mode: Repeat the steps above but change "HOTEL" to "OFF".  |
|             | F               | Depress and hold the "P/C" button while switching on from Standby with button "P+" on the TV. With button "OK" set the Hotel mode to "OFF".  |
| 11          | A/D             | Menu guide: "Timer and key symbol", "OK", with the buttons $\overline{\mathbb{V}}$ , $\underline{\mathbb{A}}$ select the key symbol then indicated on red background, "OK", enter a 4-digit number, "OK", "TV". The child lock remains active even if it has been unlocked several times (by entering the code number). To cancel: enter the code number via the menu (see above) or by pressing the buttons $\boxed{\mathbb{W}}$ , $\boxed{\mathbb{V}}$ , $\boxed{\mathbb{W}}$ , $\boxed{\mathbb{W}}$ , "OK" in this order. |
|             | C/E             | Menu guide: Sub-menu "Timer-Security-System"; "OK", enter 4-digit code number and switch-off time. Cancel as described under "B/E".  |

| Code<br>No. | Models<br>Group | Sequence of Operations  |
|-------------|-----------------|---|
| 11          | I/J             | Menu guide: "i", "Dialog Center", "Child lock", enter a 4-digit code number. Cancel as described under "A/D".   |
|             | A/D             | Sub-menu "SPECIAL FUNCTION", "OSD ON OFF", "OK".  |
| 12          | В               | Menu guide: "i", "Special Functions", "Settings", "Picture/Sound Options" on/off, cancel with respective button. See "F" for individual programme positions.  |
|             | C/E/F           | Menu guide: "i", "Special Functions", "Settings", "Picture/Sound Options on/off".   |
|             | I/J             | Menu guide: "i", "Dialog Center", "Special Functions", "Picture/Sound Options on/off" (group J: "visible/invisible).  |
| 13          | B/C             | Menu guide: "i", "Picture settings" or "Picture menu", "Peaking".   |
|             | I/J             | "Eye" button, "Personal", "OK"  |
| 14          | B/C             | Menu guide: "i", "Special Functions", "Service" or "Settings", "Luma delay".  |
|             | I/J             | Menu guide: "i", "Dialog Center", "Service", "Colour match"   |
| 15          | B/C/E/<br>F/I/J | Buttons "i" and "AUX". The figure following the decimal point indicates the EPROM version.  |
| 16          | В               | Menu guide: "i", "Special Functions", "Settings", "PIP Size/Frame/Contrast".  PIP Adjustment Mode: Depress and hold down the "PIP" button while switching the TV on with the mains button. The PIP is faded in and "PIP Adjustment" is displayed on the screen. To change the vertical position: press "P+" or "P-". To change the horizontal position: press "+" or "-". To change the colour of the PIP frame: button "IDTV". To change the PIP size: button "16:9". To change the contrast: button brightness "+/-". To store the new data and, at the same time, to leave the PIP Adjustment mode, press the "OK" button. |
|             | С               | Menu guide: "i", "Special Functions", "Settings", "PIP frame" and "Frame brightness".   |
|             | J               | PIP Adjustment Mode: Depress and hold the "PIP" button while switching on with the mains button. With the buttons "-", "+", "P-", "P+ the PIP position can be adjusted. Store with "OK".  |
| 17          | С               | Menu guide: "i", "TV Station Table". Under "Channel ident" put a comma in the 4th place and enter the following letters and figures in the 5th and 6th place: PB for PAL, PH for PAL H, PN for PAL N, P4 for PAL 4.43 MHz, BW for Black/White, NM for NTSC M, PG for PAL G, PI for PAL I, PM for PAL M, SE for SECAM, and N4 for NTSC 4.43 MHz.   |

| (          | Code<br>No.I | Models<br>Group   | Sequence of Operations   |
|------------|--------------|-------------------|--|
|            | 17           | E/I               | Menu guide: "i", "TV Station Table". Under "Channel Ident" put a comma in the 2nd place and enter the following letters and figures in the 3rd and 4th place: PA for PAL, SE for Secam, N3 for NTSC 3.58 MHz, N4 for NTSC 4.43 MHz. Forced settings for the AV programme positions must be entered in the "AV Settings" menu. In this menu, the "AUX" button activates the line for entering the desired data. (Models of group I: "i", "Dialog Center", "TV-Programme-Chart", move the yellow bar to "AV" and activate with the "blue button"). |
|            |              | J                 | Menu guide: "i", "TV-Programme-Chart". Under "Station name" put a comma in the 4th place and enter the following letters and figures in the 5th and 6th place: PB for PAL, NM for NTSC 3.58, SE for Secam, N4 for NTSC 4.43, PM for PAL M, PN for PAL N, P6 for Pal 60 Hz.   |
|            | 18           | Α                 | Depress and hold the "P/C" button on the remote control while switching on with the mains button. Select "OSD Position" in the menu and set the desired horizontal position. Confirm with "OK" and press "i" to return to the normal viewing mode.   |
|            | 10           | ĸ                 | Depress and hold the "i" button on the remote control while switching on with the mains button. Set the desired OSD position in the menu and store with "OK".  |
|            | 19           | A/C/E/<br>F/G/H/K | Press and hold the "P/C" button on the remote control for ca. 4 seconds.   |
|            |              | J                 | Menu guide: "i", "OK" menu item "Search for new TV programmes".  |
|            | 20           | O                 | Press > on the remote control, "OK", "HIFI output variable - linear - off".  |
|            | 21           | A/C/D             | Menu guide (see also operating instructions)   |
| <b>4</b> 1 |              | E/F/I/J           | Calling up the ATS tuning system -> Language is possible   |
|            | 22           | C                 | Select the Station Table in the menu and enter the station name (6 places). For this, begin with the letters "AV" in the first two places (e.g. AV K36). Attention! The time constant changes only if AV is entered in the first two places. Additionally, the inserted display must not be switched off completely but must be set to short-time or continuous.   |

2.58 Grundig Service

| Code<br>No. | Models<br>Groupe |  |  |  |  |  |
|-------------|------------------|--|--|--|--|--|
| 22          | E/F/I/J          | Menu guide: "i", "TV Station Table". Under "Channel Ident" enter a comma in the 2nd (4th) place and the letters AV in the 3rd (5th) and 4th (6th) place. Figures in parentheses apply to models of group J.  |  |  |  |  |
|             | Α                | Select the corresponding programme position.  1. Early models with CUC 5301/5310 and processors ZC(XC) 88604 and 88606: "i", "OK", sub-menu "STATION TABLE", "OK". Under "NAME" enter the letters "EXT" (for external) in the first 3 places, then press "OK".  To cancel: Enter any station name.   |  |  |  |  |
|             |                  | 2. CUC 5301/5310 with processor ZC(XC) 88621 (Germany and France), ZC(XC) 411861 (only PAL) as well as ZC(XC) 411854 or 411862 (D/S models OIRT) and all other models: "i", "OK", sub-menu "STATION TABLE", "OK", "AV" (between the letters "P R" a decimal point appears: "P.R"), "OK".  To cancel: In the station table menu, press the buttons "AV" (point disappears) and "OK" sequentially. |  |  |  |  |
| 23          | D                | Select the corresponding programme position.  Menu guide: "i", "OK", "SPECIAL FUNCTIONS", "DESCRAMBLER", "ON".  To cancel: "i", "OK", "SPECIAL FUNCTIONS", "DESCRAMBLER", "OFF".   |  |  |  |  |
|             | B/C              | Press the buttons "AUX" and "0" in the current programme position. By repeatedly pressing the button "0" the following descrambler operating modes can be selected: "Descrambler off", "Descrambler on Stereo", "Descrambler on Mono-L" and "Descrambler on Mono-R". The selected mode is stored automatically.  |  |  |  |  |
|             | E/F              | Menu guide: "i", "OK", "Special functions", "AV Settings", "AV 1" and select "Decoder".  |  |  |  |  |
|             | G                | Button "P/C" -> "DEC". Set to "ON".  |  |  |  |  |
|             | I/J              | Menu guide: "i", "Dialog Center", "TV-Programme-Chart", "AUX" button.  |  |  |  |  |
|             | К                | In the Tune menu (call up "i"+"OK"), set "Dec" to "ON".  |  |  |  |  |
| 24          | A <sup>3</sup> ) | Menu guide: "i", "Station Table" 3rd position "Name". Overwrite "AV60" with another name or enter four blanks. Store with "OK".  |  |  |  |  |

<sup>&</sup>lt;sup>3</sup>) only certain models (see Table 1)

| Code<br>No. | Models<br>Group  | Sequence of Operations  |  |  |  |  |
|-------------|------------------|---|--|--|--|--|
|             | В                | Menu guide: "i", "TV Station Table". In the first four places of the station ident enter the word "MONO" or ".ONO" (the decimal point means "OSD off" on a per-programme basis).  To cancel: Overwrite "MONO" with any other name or enter four blanks.                         |  |  |  |  |
| 25          | C/J              | Menu guide: "i", "TV Station Table. Put a comma in the 4th place of the station ident and enter the letters "MO" in the last two places.  |  |  |  |  |
|             | E/I              | Menu guide: "i", "TV Station Table". Put a comma in the 2nd place of the station ident and enter the letters "MO" in the last two places.   |  |  |  |  |
|             | В                | Menu guide: "i", "Special functions", "Service", "White balance". The mixture of Green/Red and Blue/Red can be adjusted.  |  |  |  |  |
| 26          | С                | Menu guide: "i", "Special functions", "Service", "Code 8500", "White balance", "OK". The mixture of Green/Red and Blue/Red can be adjusted (the white area in the middle of the picture should not be coloured).  |  |  |  |  |
|             | E                | Depress and hold the "P/C" button on the remote control while switching on with the mains button. Select "White balance" in the menu. The mixture of Green/Red and Blue/Red can be adjusted.  |  |  |  |  |
|             | I/J              | Menu guide: "i", "Dialog Center", "Service", "Only for the retailer", "Code 8500". The mixture of Green/Red and Blue/Red can be adjusted.   |  |  |  |  |
|             | A <sup>3</sup> ) | Models with TP 663: Depress and hold down the "TV" button on the remote control while switching on with the mains button.  Models with TP 760: Depress and hold down the "IDTV" button on the remote control while switching on with the mains button.                          |  |  |  |  |
|             | D                | Depress and hold the "i" button on the remote control while switching on with the mains. Menu guide: "Horizontal Position", "OK", "OK", press "i" to leave the menu.  |  |  |  |  |
| 27          | E/I              | Press and hold down button "P-" on the remote control while switching on with the mains button. (This is only possible once on replacement of the NVM or $\mu$ P) To cancel the volume offset: Press and hold the "AUX" button while switching the TV on with the mains button. |  |  |  |  |

2.60 Grundig Service

| Code<br>No. | Models<br>Group | Sequence of Operations  |
|-------------|-----------------|---|
| 27          | F               | Depress and hold down button "P-" on the remote control and switch the TV on from Standby with the local "P+" button. (This is only possible once on replacement of the NVM or $\mu P).$ To cancel the volume offset: Press and hold the "AUX" button on the remote control and switch the TV on from Standby with the local "P+" button. |
|             | J               | Restoration of the settings at the time of delivery: buttons "AUX", "OK"  |
| 28          | E/C/B<br>I/J    | Depress and hold button "L+" on the remote control while switching on with the mains button.  |
|             | F               | Depress and hold button "L+" on the remote control and switch the TV on from Standby with the local "P+" button.  |
| 29          | I/J             | Menu guide: "i", "Dialog Center", "Service", "for authorised dealer", "Code 8500". Press the yellow button. After having changed the programme, the blue background is switched off. This function is cancelled when switching off.   |
| 30          | G               | Depress and hold button "L+" on the TV and switch the TV on with the mains button. Repeat to re-activate the economy switch.  |
| 31          | J               | Demo on: Depress and hold button "L+" on the TV and switch the TV on with the mains button. Press the "P+" button within 10 seconds. Demo off: Press the "P-" button on the TV within 10 seconds after having switched on.  |

#### TV

# Service Manuals from 1992 onwards sorted by sets

| Set                                | Part.No.   | Тур  | CUC      |    |
|------------------------------------|--|--|----------|----|
| Athen T 1655 TEXT D/GB             | 72010-013.60   | SM   |          | 94 |
| Atlan. 72/9IDTV ST172/9 IDTV       | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1822 | 94 |
| Atlanta 72 IDTV ST172 IDTV         | 72010-014.20   | SM   | CUC 1822 | 94 |
| Atlanta SE 7220 IDTV/LOG           | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| Atlanta SE 7020 I DTV/LOG<br>D/GB  | 72010-019.30<br>72010-019.31<br>72010-019.32   | SM<br>1. Supp.<br>2. Supp.   | CUC 1826 | 97 |
| Atlanta SE 7289 IDTV/LOG           | 72010-019.30   | SM   | CUC 1826 | 96 |
| Berlin SE 70-100/8 D/GB            | 72010-021.10   | SM   | CUC 1828 | 97 |
| Berlin SE 7290 IDTV LOG<br>D/GB    | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25<br>72010-014.26 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 1822 | 96 |
| Boston SE 7090 IDTV/LOG<br>D/GB    | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| Boston SE 7090 IDTV/LOG<br>D/GB    | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| Boston SE 7090/8 I DTV/LOG<br>D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| Boston SE 7090/8 IDTV/LOG<br>D/GB  | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| Boston ST 170 IDTV D/GB            | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                                     | CUC 1824 | 95 |
| Boston ST 270 IDTV/LOG             | 72010-019.30   | SM   | CUC 1825 | 96 |
| Boston ST 270/8 IDTV/LOG           | 72010-019.30   | SM   | CUC 1825 | 96 |
| Copenhagen ST 1663 TXT             | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361 | 92 |
| Copenhagen ST 1663/8TXT            | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361 | 92 |
| Copenhagen ST 763<br>TOP/LOG D/GB  | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 6360 | 96 |
| Copenhagen ST 763 TOP              | 72010-015.00   | SM   | CUC 6360 | 94 |
| Copenhagen ST 763/9 TOP<br>D/GB    | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.             | CUC 6360 | 96 |
| CT 800 D/GB                        | 72010-001.90<br>72010-001.91   | 1. Supp.   |          | 92 |
| Denver 82-100 PALplus D/GB         | 72010-019.90<br>72010-019.91<br>72010-019.92   | SM<br>1. Supp.<br>2. Supp.   | CUC 1984 | 97 |
| Denver 82-100/9 PALplus            | 72010.019.90<br>72010.019.91   | SM<br>1. Supp.   | CUC 1984 | 97 |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

| Set                       | Part.No.   | Тур  | CUC                     |    |
|---------------------------|--|--|-------------------------|----|
| E 55-700 TOP              | 72010-017.50   | SM   | CUC 6450                | 95 |
| E 55-700/9 TOP            | 72010-017.50   | SM   | CUC 6450                | 95 |
| E 63-911 IDTV             | 72010-014.20   | SM   | CUC 1822                | 94 |
| E 72-170 IDTV Elegance    | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 1822                | 94 |
| E 72-911 DPL              | 72010-014.70   | SM   | D/GB/F/I/DK<br>CUC 7861 | 94 |
| E 72-911 IDTV             | 72010-014.20   | SM   | CUC 1822                | 94 |
| E 72-911 IDTV PIP         | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.             | D/GB/F/I/DK<br>CUC 7861 | 94 |
| E 72-911 TOP              | 72010-013.70   | SM   | CUC 7851                | 93 |
| G 1000                    | 72010-017.60<br>72010-017.61<br>72010-017.62   | SM<br>1. Supp.<br>2. Supp.                                     |                         | 93 |
| Greenv. 7003 NIC/TOP D/GB | 72010-020.70   | SM   | CUC 2030 N              | 97 |
| Greenville 37 SP 737 text | 72010-016.80<br>72010-016.81   | SM<br>1. Supp.   | CUC 7350                | 94 |
| Greenville 55 T 5574 TOP  | 72010-015.40<br>72010-015.41   | SM<br>1. Supp.   | CUC 7300                | 95 |
| Greenville 70 ST 1770 TOP | 72010-015.00<br>72010-015.01   | SM<br>1. Supp.   | CUC 6360                | 95 |
| Greenville 7002 TEXT      | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330                | 96 |
| Greenville 7002/8 TEXT    | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330                | 96 |
| Greenville 7003 text D/GB | 72010-020.70   | SM   | CUC 2030                | 97 |
| GT 1401                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 1401 I                 | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 1402                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 1402 I                 | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2001                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2001 I                 | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2003                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2003 I                 | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2005                   | 72010-019.10   | SM   | G 1000 St.              | 96 |
| GT 2101                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |
| GT 2103                   | 72010-017.60<br>72010-017.61   | SM<br>1. Supp.   | G 1000                  | 96 |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

| Set                   |              | Part.No.                                     | Тур                        | CUC                     |    |
|-----------------------|--------------|--|----------------------------|-------------------------|----|
| GT 2105               | 72010-019.10 | SM   | G 1000 St.                 | 96                      |    |
| Hamburg ST 770/9 TOP  | )            | 72010-015.00<br>72010-015.01                 | SM<br>1. Supp.             | CUC 6360                | 95 |
| HRM 400 SAT / BD 3    |              | 72010-011.90                                 | SM                         |                         | 92 |
| HRM 401 SAT / BD 1    |              | 72010-011.90                                 | SM                         |                         | 92 |
| HRM 405 SAT / BD OIF  | RT           | 72010-011.90                                 | SM                         |                         | 92 |
| HRM 420 DSR 118 MH    | Z            | 72010-011.90                                 | SM                         |                         | 92 |
| HRM 806 SAT-PAL/BD    | 3 NTSC       | 72010-011.90<br>72010-011.91                 | SM<br>1. Supp.             |                         | 92 |
| HRM 807 SAT / UHF-O   | IRT          | 72010-011.90<br>72010-011.91                 | SM<br>1. Supp.             |                         | 92 |
| HRM 815 TERR OIRT/E   | 3D3 OIRT     | 72010-011.90<br>72010-011.91                 | SM<br>1. Supp.             |                         | 92 |
| HRM 825 FM            |              | 72010-011.90<br>72010-011.91                 | SM<br>1. Supp.             |                         | 92 |
| HRM 851 SAT/BD 1      |              | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 852 SAT/UHF       |              | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 853 FR SAT/UHF    |              | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 854 SAT/HYPER     | B.STEREO     | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 855 SAT/OIRT      |              | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 857 SAT/UHF-OIF   | RT           | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 858 A SAT/BD 3-   | STER.        | 72010-015.50                                 | SM                         |                         | 95 |
| HRM 859 SAT/BD 1-OI   | 72010-015.50 | SM   |                            | 95                      |    |
| Lissabon SE 5576 text | D/GB         | 72010.016.80<br>72010.016.81                 | SM<br>1. Supp.             | CUC 7350                | 94 |
| M 1403                | D/GB         | 72010-020.50                                 | SM                         | CUC 7303                | 97 |
| M 1403 TXT            | D/GB         | 72010-020.50                                 | SM                         | CUC 7303                | 97 |
| M 2003 TXT            | D/GB         | 72010-020.50                                 | SM                         | CUC 7303                | 97 |
| M 2103 TXT            | D/GB         | 72010-020.50                                 | SM                         | CUC 7303                | 97 |
| M 2150 TXT            | D/GB         | 72010-020.60                                 | SM                         | CUC 7350                | 97 |
| M 45-775 TOP          | D/GB         | 72010-012.00<br>72010-012.01                 | SM<br>1. Supp.             | D/GB/F/I/NL<br>CUC 5350 | 93 |
| M 50-775 TOP          | D/GB         | 72010-012.00<br>72010-012.01                 | SM<br>1. Supp.             | CUC 5350                | 93 |
| M 55-105 IDTV         | D/GB         | 72010-014.20<br>72010-014.21<br>72010-014.22 | SM<br>1. Supp.<br>2. Supp. | CUC 1800                | 95 |
| M 55-105/9 IDTV       | D/GB         | 72010-014.20<br>72010-014.21<br>72010-014.22 | SM<br>1. Supp.<br>2. Supp. | CUC 1800                | 95 |
| M 55-280/8 IDTV/LOG   | D/GB         | 72010-019.30<br>72010-019.31<br>72010-019.32 | SM<br>1. Supp.<br>2. Supp. | CUC 1805                | 97 |
| M 55-775 TOP          |              | 72010-011.40                                 | SM                         | D/GB/F/I/NL<br>CUC 5360 | 93 |
| M 55-775/8 TOP        | D/GB         | 72010-011.40                                 | SM                         | CUC 5360                | 93 |
| M 61-1690 DPL         | D/GB         | 72010-018.70                                 | SM                         | CUC 6469                | 96 |

| Set                   |      | Part.No.   | Тур  | CUC              |    |
|-----------------------|------|--|--|------------------|----|
| M 61-1690 TOP/LOG     | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 6369         | 96 |
| M 63-105 IDTV         | D/GB | 72010-014.20   | SM   | CUC 1822         | 94 |
| M 63-105/9 IDTV       | D/GB | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1822         | 94 |
| M 63-115/9 IDTV       | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                         | CUC 1822         | 94 |
| M 63-281 IDTV/LOG     | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 63-281 IDTV/LOG     | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 63-281/8 IDTV/LOG   | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 63-281/8 IDTV/LOG   | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 63-470 CTI/TEXT     | D/GB | 72010-000.70   | SM   | CUC<br>3600/3800 | 92 |
| M 63-475 CTI/TEXT     | D/GB | 72010-000.70   | SM   | CUC<br>3600/3800 | 92 |
| M 63-670 TOP          | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361         | 92 |
| M 63-775 TOP          | D/GB | 72010-014.00   | SM   | CUC 5365         | 93 |
| M 63-775/8 TOP        | D/GB | 72010-014.00   | SM   | CUC 5365         | 93 |
| M 63-776/9 TOP        | D/GB | 72010-015.00<br>72010-015.01   | SM<br>1. Supp.   | CUC 6365         | 95 |
| M 70-169/9 IDTV       | D/GB | 72010-016.10   | SM   | CUC 1951         | 95 |
| M 70-1690 DPL         | D/GB | 72010-018.70   | SM   | CUC 6469         | 96 |
| M 70-1690 DPL/IDTV    | D/GB | 72010-018.90   | SM   | CUC 1961         | 96 |
| M 70-1690 DPL/IDTV/L0 | OG   | 72010-018.90   | SM   | CUC 1961         | 96 |
| M 70-1690 TOP/LOG     | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.             | CUC 6369         | 96 |
| M 70-269/9 Referenc   | D/GB | 72010-019.90   | SM   | CUC 1952         | 97 |
| M 70-280 IDTV/LOG     |      | 72010-019.30   | SM   | CUC 1825         | 96 |
| M 70-280 IDTV/LOG     | D/GB | 72010-019.30   | SM   | CUC 1826         | 96 |
| M 70-280/8 IDTV/LOG   |      | 72010-019.30   | SM   | CUC 1825         | 96 |
| M 70-280/8 IDTV/LOG   | D/GB | 72010-019.30   | SM   | CUC 1826         | 96 |
| M 70-281 IDTV/LOG     |      | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 70-281 IDTV/LOG     | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 70-281/8 IDTV/LOG   |      | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |
| M 70-281/8 IDTV/LOG   | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826         | 96 |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

| Set                                | Part.No.   | Тур  | CUC                           |    |
|------------------------------------|--|--|-------------------------------|----|
| M 70-490/9                         | 72010-002.80   | SM   | CUC 3800                      | 92 |
| M 70-490/90 S                      | 72010-002.80   | SM   | CUC 3800                      | 92 |
| M 70-695 TOP                       | 72010-011.20<br>72010-011.21   | SM<br>1. Supp.   | CUC 6851                      | 92 |
| M 70-695/9 TOP                     | 72010-011.20<br>72010-011.21   | SM<br>1. Supp.   | D/GB/F/I/NL<br>CUC 6851       | 92 |
| M 70-781 IDTV                      | 72010-012.90   | SM   | D/GB/F/I/NL/<br>P CUC<br>1821 | 92 |
| M 70-791 IDTV                      | 72010-012.90   | SM   | CUC 1851                      | 92 |
| M 72-100 IDTV                      | 72010-019.30<br>72010-019.31<br>72010-019.32   | SM<br>1. Supp.<br>2. Supp.   | CUC 1826                      | 97 |
| M 72-100/8 IDTV                    | 72010-019.30<br>72010-019.31<br>72010-019.32   | SM<br>1. Supp.<br>2. Supp.   | CUC 1826                      | 97 |
| M 72-105 IDTV                      | 72010-014.20   | SM   | CUC 1852                      | 93 |
| M 72-105/9 IDTV                    | 72010-014.20   | SM   | CUC 1852                      | 94 |
| M 72-105/9 IDTV/PIP                | 72010-014.20   | SM   | CUC 1852                      | 94 |
| M 72-115 IDTV                      | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                         | CUC 1852                      | 95 |
| M 72-115/9 IDTV PIP                | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                         | CUC 1852                      | 95 |
| M 72-215 IDTV Reference            | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.             | D/GB/F/I/NL<br>CUC 1852       | 93 |
| M 72-215/9 IDTV/PIP Reference      | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.             | D/GB/F/I/NL<br>CUC 1852       | 95 |
| M 72-270 IDTV/LOG<br>Elegance D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826                      | 96 |
| M 72-270 IDTV/LOG Elegance         | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826                      | 96 |
| M 72-315 IDTV Reference            | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25<br>72010-014.26 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 1852                      | 96 |

| Set                           | Part.No.   | Тур  | CUC              |    |
|-------------------------------|--|--|------------------|----|
| M 72-315/9 IDTV/PIP/Reference | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25<br>72010-014.26                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.                         | CUC 1852         | 96 |
| M 72-410 Reference D/GB       | 72010-019.90   | SM   | CUC 1842         | 97 |
| M 72-410/9 Reference D/GB     | 72010-019.90   | SM   | CUC 1842         | 97 |
| M 72-410/9 Reference/PIP      | 72010-019.90   | SM   | CUC 1842         | 97 |
| M 72-795 TOP D/GB             | 72010-013.70   | SM   | CUC 7851         | 93 |
| M 72-795/9 TOP D/GB           | 72010-013.70   | SM   | CUC 7851         | 93 |
| M 82-102 IDTV                 | 72010-012.90   | SM   | CUC 1881         | 92 |
| M 82-105/9 IDTV D/GB          | 72010-012.90<br>72010-012.91   | SM<br>1. Supp.   | CUC<br>1881/1892 | 93 |
| M 82-105/9 IDTV/PIP D/GB      | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1882         | 94 |
| M 82-115/9 IDTV PIP D/GB      | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.   | CUC 1882         | 94 |
| M 82-169 PAL PLUS D/GB        | 72010-016.00   | SM   | CUC 1981         | 95 |
| M 82-169/9 IDTV D/GB/F        | 72010-016.10   | SM   | CUC 1982         | 95 |
| M 82-1690 TOP/LOG D/GB        | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06<br>72010-015.07<br>72010-015.08 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.<br>7. Supp.<br>8. Supp. | CUC 6360         | 96 |
| M 82-169a PAL PLUS D/GB       | 72010-016.00<br>72010-016.01   | SM<br>1. Supp.   | CUC 1981         | 96 |
| M 82-269/9 Ref D/GB           | 72010-019.90   | SM   | CUC 1984         | 97 |
| M 82-269PALplus/LOG D/GB      | 72010-019.90   | SM   | CUC 1983         | 97 |
| M 82-795 TOP D/GB             | 72010-013.10<br>72010-013.11   | SM<br>1. Supp.   | CUC 7890         | 94 |
| M 82-795/9 PIP/TOP D/GB       | 72010-013.10<br>72010-013.11   | SM<br>1. Supp.   | CUC 7880         | 94 |
| M 84-210/8 IDTV/LOG<br>D/GB   | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1827         | 96 |
| M 84-210/8 IDTV/LOG D/GB      | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1827         | 96 |
| M 95-102 IDTV D/GB            | 72010-012.90   | SM   | CUC 1892         | 92 |
| M 95-105/9 IDTV D/GB          | 72010-012.90<br>72010-012.91   | SM<br>1. Supp.   | CUC<br>1881/1892 | 94 |
| M 95-105/9 IDTV/PIP D/GB      | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1893         | 94 |
| M 95-115/9 IDTV PIP D/GB      | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.   | CUC 1893         | 94 |
| M 95-410/9 Reference/PIP      | 72010-019.90   | SM   | CUC 1842         | 97 |

| Set                               | Part.No.                                     | Тур                        | cuc              |    |
|-----------------------------------|--|----------------------------|------------------|----|
| M 95-411/9 Reference/PIP D/GB     | 72010-019.90<br>72010-019.91<br>72010-019.92 | SM<br>1. Supp.<br>2. Supp. | CUC 1894         | 97 |
| M 95-795/9 PIP/TOP D/GB           | 72010-007.30<br>72010-007.31                 | SM<br>1. Supp.             | CUC 7880         | 94 |
| Melbourne SE 7210 TOP D/GB        | 72010.020.70<br>72010.020.71                 | SM<br>1. Supp.             | CUC 2031         | 97 |
| Melbourne SE 7210/NIC/TOP<br>D/GB | 72010.020.70<br>72010.020.71                 | SM<br>1. Supp.             | CUC 2031 N       | 97 |
| MINERVA M 1403 D/GB               | 72010-020.50                                 | SM                         | CUC 7303         | 97 |
| MINERVA M 1403 TXT D/GB           | 72010-020.50                                 | SM                         | CUC 7303         | 97 |
| MINERVA M 2003 TXT D/GB           | 72010-020.50                                 | SM                         | CUC 7303         | 97 |
| MINERVA M 2103 TXT D/GB           | 72010-020.50                                 | SM                         | CUC 7303         | 97 |
| MINERVA P 3746 text D/GB          | 72010-010.50<br>72010-010.51                 | SM<br>1. Supp.             | CUC 5301         | 92 |
| MINERVA P 3747 D/GB               | 72010-012.60                                 | SM                         | CUC 5303         | 92 |
| MINERVA P 3748 D/GB               | 72010-013.60                                 | SM                         | CUC 6300         | 93 |
| MINERVA P 3770 text D/GB          | 72010-017.60                                 | SM                         | G 1000           | 94 |
| MINERVA P 4047 D/GB               | 72010-012.60                                 | SM                         | CUC 5303         | 92 |
| MINERVA P 4548 text D/GB          | 72010-013.60                                 | SM                         | CUC 6300         | 93 |
| MINERVA ST 6303 D/GB              | 72010-011.40<br>72010-011.41<br>72010-011.42 | SM<br>1. Supp.<br>2. Supp. | CUC 5360         | 94 |
| MINERVA ST 6367 text D/GB         | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5360         | 92 |
| MINERVA ST 6368 text D/GB         | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5360         | 92 |
| MINERVA ST 7068 text D/GB         | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5360         | 92 |
| MINERVA ST 8277 TOP D/GB          | 72010-013.10                                 | SM                         | CUC<br>7880/7890 | 93 |
| MINERVA T 6348 text D/GB          | 72010-013.80                                 | SM                         | CUC 6310         | 93 |
| MINERVA T 5148 D/GB               | 72010-013.60                                 | SM                         | CUC 6300         | 93 |
| MINERVA T 5570 text D/GB          | 72010-017.60                                 | SM                         | G 1000           | 95 |
| MINERVA T 6346 text D/GB          | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310         | 92 |
| MST 400 D/GB                      | Einzelrep.                                   | Е                          |                  | 93 |
| MW 70-100/8 D/GB                  | 72010-021.10                                 | SM                         | CUC 1828         | 97 |
| MW 70-269 PALplus D/GB            | 72010.019.90<br>72010.019.91                 | SM<br>1. Supp.             | CUC 1952         | 97 |
| MW 82-100/9 D/GB                  | 72010.019.90<br>72010.019.91                 | SM<br>1. Supp.             | CUC 1984         | 97 |
| MW 82-100/9 PALplus D/GB          | 72010-019.90<br>72010-019.91<br>72010-019.92 | SM<br>1. Supp.<br>2. Supp. | CUC 1983         | 97 |
| MW 82-269/9 Reference             | 72010.019.90<br>72010.019.91                 | SM<br>1. Supp.             | CUC 1984         | 97 |
| P 14-6210/4                       | 72010-019.80                                 | SM                         | CUC 400          | 96 |
| P 14-6210/4 text                  | 72010-019.80                                 | SM                         | CUC 400          | 96 |
| P 14-6210/6                       | 72010-019.80                                 | SM                         | CUC 400          | 96 |
| P 14-6210/6 text                  | 72010-019.80                                 | SM                         | CUC 400          | 96 |
| P 14-6210/8                       | 72010-019.80                                 | SM                         | CUC 400          | 96 |
| P 14-6210/8 text                  | 72010-019.80                                 | SM                         | CUC 400          | 96 |

| Set                 |      | Part.No.   | Тур  | CUC      |    |
|---------------------|------|--|--|----------|----|
| P 20-6210/4 text    |      | 72010-019.80   | SM   | CUC 400  | 96 |
| P 20-6210/8 text    |      | 72010-019.80   | SM   | CUC 400  | 96 |
| P 25-449/12         | D/GB | 72010-009.00   | SM   | CUC 4200 | 92 |
| P 27-649/12         | D/GB | 72010-013.00   | SM   | CUC 5200 | 92 |
| P 37-040            | D/GB | 72010-010.00   | SM   | CUC 5300 | 92 |
| P 37-040 A          | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-040 A INT.     | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-040 P/S        | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-050            | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-050 GB         | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-050 INT+OIRT   | D/GB | 72010-012.60   | SM   | CUC 5303 | 92 |
| P 37-060            | D/GB | 72010-013.60   | SM   | CUC 6300 | 93 |
| P 37-060 OIRT       | D/GB | 72010-013.60   | SM   | CUC 6300 | 93 |
| P 37-065            | D/GB | 72010-017.60   | SM   | G 1000   | 94 |
| P 37-065/5          | D/GB | 72010-017.80   | SM   | CUC 7301 | 94 |
| P 37-066/5          | D/GB | 72010-019.40   | SM   | CUC 7303 | 96 |
| P 37-070            | D/GB | 72010-017.80   | SM   | CUC 7301 | 94 |
| P 37-070 GB         | D/GB | 72010-017.80   | SM   | CUC 7301 | 94 |
| P 37-071            | D/GB | 72010-019.40   | SM   | CUC 7303 | 96 |
| P 37-071 GB         | D/GB | 72010-019.40   | SM   | CUC 7303 | 96 |
| P 37-071-071 IR     | D/GB | 72010-019.40<br>72010-019.41<br>72010-019.42<br>72010-019.43                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                         | CUC 7303 | 96 |
| P 37-3035 text      | D/GB | 72010-019.40<br>72010-019.41<br>72010-019.42   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7303 | 97 |
| P 37-549/12         | D/GB | 72010-012.10   | SM   | CUC 5305 | 92 |
| P 37-640 TEXT       | D/GB | 72010-013.60   | SM   | CUC 6300 | 93 |
| P 37-640 TT/GB      | D/GB | 72010-013.60   | SM   | CUC 6300 | 93 |
| P 37-730 MegASIS    | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301 | 97 |
| P 37-730 text       | D/GB | 72010-017.80   | SM   | CUC 7301 | 96 |
| P 37-730 text ASIS  | D/GB | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301 | 96 |
| P 37-730 text GB    | D/GB | 72010-017.80   | SM   | CUC 7301 | 94 |
| P 37-730/5 text ICN | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.             | CUC 7301 | 97 |
| P 37-731 text IR    | D/GB | 72010-019.40<br>72010-019.41<br>72010-019.42   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7303 | 97 |
| P 37-731 text/GB    | D/GB | 72010-019.40   | SM   | CUC 7303 | 96 |
| P 37-731/12 text    | D/GB | 72010-019.50   | SM   | CUC 7305 | 96 |

| Set                   |             | Part.No.   | Тур                                    | CUC        |    |
|-----------------------|-------------|--|--|------------|----|
| P 37-732/5 text       | D/GB        | 72010-019.40<br>72010-019.41<br>72010-019.42<br>72010-019.43 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp. | CUC 7303   | 96 |
| P 37-740 SAT          | D/GB        | 72010-015.40   | SM                                     | CUC 7300   | 94 |
| P 37-740 TOP          | D/GB        | 72010-015.40   | SM                                     | CUC 7300   | 94 |
| P 37-841 FR           | F/GB        | 72010-019.60   | SM                                     | CUC 7303 F | 96 |
| P 37-843 FR           | F/GB        | 72010-018.50   | SM                                     | CUC 7301 F | 94 |
| P 37-845 FR+SAT       | F/GB        | 72010-016.60   | SM                                     | CUC 7300 F | 95 |
| P 37-846 FR           | F/GB        | 72010-019.60<br>72010-019.61<br>72010-019.62                 | SM<br>1. Supp.<br>2. Supp.             | CUC 7303 F | 97 |
| P 3770                | D/GB        | 72010-017.60   | SM                                     | G 1000     | 94 |
| P 40-050              | D/GB        | 72010-012.60   | SM                                     | CUC 5303   | 92 |
| P 40-060              | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 40-060 OIRT         | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 40-64 FR/FM/CL      | F/GB        | 72010-016.40   | SM                                     | CUC 6301 F | 95 |
| P 40-64/4 ASIS        | D/GB        | 72010-014.80<br>72010-014.81                                 | SM<br>1. Supp.                         | CUC 6301   | 95 |
| P 40-64/4 FM/CL       | D/GB        | 72010-014.80   | SM                                     | CUC 6301   | 94 |
| P 40-640 TEXT D/I/F   |             | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 40-740 TOP          | D/GB        | 72010-015.40   | SM                                     | CUC 6300   | 94 |
| P 42-060              | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 45-540 ASIS         | D/GB        | 72010-012.70   | SM                                     | CUC 5301   | 92 |
| P 45-540 DS / ASIS    | D/GB        | 72010-012.70   | SM                                     | CUC 5301   | 92 |
| P 45-64/4 ASIS        | D/GB        | 72010-014.80<br>72010-014.81                                 | SM<br>1. Supp.                         | CUC 6301   | 95 |
| P 45-640 FT/GB        | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 45-640 OIRT         | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 45-640 TEXT         | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 45-731 text         | D/GB        | 72010-019.40   | SM                                     | CUC 7303   | 96 |
| P 45-740 TOP          | D/GB        | 72010-015.40   | SM                                     | CUC 7300   | 94 |
| P 45-841 FR           | F/GB        | 72010-019.60   | SM                                     | CUC 7303 F | 96 |
| P 45-843 FR           | F/GB        | 72010-019.46   | SM                                     | CUC 7303   | 96 |
| P 45-845 FR           | F/GB        | 72010-016.60   | SM                                     | CUC 7300 F | 95 |
| P 50-540 FT/GB        | D/GB        | 72010-010.50<br>72010-010.51                                 | SM<br>1. Supp.                         | CUC 5301   | 92 |
| P 50-640 FT/GB        | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| P 50-640 TEXT         | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| Salzburg ST 770 TOP   | D/GB        | 72010-015.00   | SM                                     | CUC 6360   | 94 |
| Salzburg ST 770 TOP/L | .OG<br>D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp. | CUC 6360   | 94 |
| SE 4264               | D/GB        | 72010-012.60   | SM                                     | CUC 5303   | 92 |
| SE 4264 TEXT          | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| SE 5564 TEXT          | D/GB        | 72010-013.60   | SM                                     | CUC 6300   | 93 |
| SE 5574 TOP           | D/GB        | 72010.015.40   | SM                                     | CUC 7300   | 94 |
| SE 6367 TEXT          | D/GB        | 72010-011.40   | SM                                     | CUC 5361   | 92 |

| Set                    |       | Part.No.   | Тур  | cuc        |    |
|------------------------|-------|--|--|------------|----|
| SE 6367 TEXT           | D/GB  | 72010-011.40   | SM<br>1 Supp   | CUC 5361   | 92 |
| SE 6376 TOP            | D/GB  | 72010-011.41<br>72010.015.00   | 1. Supp.<br>SM   | CUC 6360   | 94 |
| SE 6376 TOP/LOG        | D/GB  | 72010-015.00<br>72010-015.01<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 6360   | 96 |
| SE 7016/9 Ref./PIP Tre | ento  | 72010-019.90   | SM   | CUC 1952   | 97 |
| SE 7065 TEXT           | D/GB  | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| SE 7066/8 TOP          | D/GB  | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| SE 7075 TEXT           | D/GB  | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| SE 7085 TEXT           |       | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp  | CUC 5360   | 93 |
| SE 7086 TOP            |       | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| SE 7087 TOP/LOG        |       | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                         | CUC 1824   | 95 |
| SE 7088 IDTV           |       | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                                     | CUC 1824   | 95 |
| SE 7089 IDTV/LOG       |       | 72010-019.30   | SM   | CUC 1825   | 96 |
| SE 7277 text           |       | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6331   | 96 |
| SE 7286 TOP            |       | 72010-014.00   | SM   | CUC 5365   | 93 |
| SE 7287 TOP            |       | 72010-015.00   | SM   | CUC 6365   | 94 |
| SE 7287 TOP/LOG        |       | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                         | CUC 6360   | 95 |
| SE 7288 IDTV           |       | 72010-014.20   | SM   | CUC 1822   | 93 |
| SE 7288/9 IDTV         | D/GB  | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1822   | 94 |
| SE 8216/9 Ref./PIP De  | enver | 72010-019.90   | SM   | CUC 1984   | 97 |
| SER 6350               | D/GB  | 72010-015.00   | SM   | CUC 6360   | 94 |
| SER 7300               | D/GB  | 72010-015.40   | SM   | CUC 7300   | 94 |
| ST 55-725 FT/GB        | D/GB  | 72010-016.80<br>72010-016.81   | SM<br>1. Supp.   | CUC 7350   | 96 |
| ST 55-750 text         | D/GB  | 72010-016.80<br>72010-016.81   | SM<br>1. Supp.   | CUC 7350   | 94 |
| ST 55-750/9 text       | D/GB  | 72010-016.80<br>72010-016.81   | SM<br>1. Supp.   | CUC 7350   | 94 |
| ST 55-753 FR/NIC       | D/GB  | 72010-016.20   | SM   | CUC 5350 F | 95 |
| ST 55-800 text         | D/GB  | 72010-016.80<br>72010-016.81<br>72010-016.83   | SM<br>1. Supp.<br>3. Supp.   | CUC 7350   | 94 |

| Set                  |      | Part.No.   | Тур  | CUC        |    |
|----------------------|------|--|--|------------|----|
| ST 55-800/9 text     | D/GB | 72010-016.80<br>72010-016.81<br>72010-016.83   | SM<br>1. Supp.<br>3. Supp.   | CUC 7350   | 94 |
| ST 55-801/9 text     | D/GB | 72010-016.80<br>72010-016.81<br>72010-016.83<br>72010-016.84<br>72010-016.85                                 | SM<br>1. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.                         | CUC 7350   | 94 |
| ST 55-875 FR/NIC     | D/GB | 72010-016.20<br>72010-016.21   | SM<br>1. Supp.   | CUC 5350 F | 95 |
| ST 55-876/9 TEXT     | D/GB | 72010-016.80<br>72010-016.81   | SM<br>1. Supp.   | CUC 7350   | 95 |
| ST 55-95 ECO         | D/GB | 72010-016.80<br>72010-016.81<br>72010-016.83   | SM<br>1. Supp.<br>3. Supp.   | CUC 7350   | 94 |
| ST 63-160 IDTV       | D/GB | 72010-014.20   | SM   | CUC 1822   | 94 |
| ST 63-160a IDTV      | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25<br>72010-014.26 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | CUC 1822   | 96 |
| ST 63-255 IDTV/LOG   | D/GB | 72010-019.30   | SM   | CUC 1825   | 96 |
| ST 63-255/8 IDTV/LOG | D/GB | 72010-019.30   | SM   | CUC 1825   | 96 |
| ST 63-650 TEXT       | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 63-650/8 TOP      | D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp.   | CUC 5360   | 94 |
| ST 63-651/9 TOP      | D/GB | 72010-015.00   | SM   | CUC 6360   | 94 |
| ST 63-655/8 FT/GB    | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 63-655/8 TOP      |      | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 63-660 TOP+A TOP  |      | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 63-671 TEXT       |      | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| ST 63-700 DPL/NIC/FT | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.   | CUC 2040 N | 97 |
| ST 63-700 FR         | F/GB | 72010-020.80   | SM   | CUC 2030   | 97 |
| ST 63-700 NIC/FT     | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.   | CUC 2030 N | 97 |
| ST 63-700 NIC/text   | D/GB | 72010-020.70   | SM   | CUC 2030 N | 97 |
| ST 63-700 NIC/TOP    | D/GB | 72010-020.70   | SM   | CUC 2030 N | 97 |
| ST 63-700 text       | D/GB | 72010-020.70   | SM   | CUC 2030   | 97 |
| ST 63-710 NIC/text   | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.   | CUC 2030 N | 97 |
| ST 63-720/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330   | 96 |
| ST 63-720/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330   | 96 |
| ST 63-725/8 FT/GB    | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330   | 96 |

| Set                 |      | Part.No.   | Тур  | CUC        |    |
|---------------------|------|--|--|------------|----|
| ST 63-725/8 text    | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330   | 96 |
| ST 63-750 text      | D/GB | 72010-016.90   | SM   | CUC 6330   | 94 |
| ST 63-750/9 TOP     | D/GB | 72010-015.00<br>72010-015.01   | SM<br>1. Supp.   | CUC 6360   | 95 |
| ST 63-755 TOP       | D/GB | 72010-015.00   | SM   | CUC 6360   | 94 |
| ST 63-755 TOP/LOG   | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                                     | CUC 6360   | 95 |
| ST 63-755/9 TOP     | D/GB | 72010-015.00   | SM   | CUC 6360   | 94 |
| ST 63-755/9 TOP/LOG | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.             | CUC 6360   | 96 |
| ST 63-760 TOP       | D/GB | 72010-014.00   | SM   | CUC 5365   | 93 |
| ST 63-760/8 TOP     | D/GB | 72010-014.00   | SM   | CUC 5365   | 93 |
| ST 63-760/9 DPL     | D/GB | 72010-014.70   | SM   | CUC 7861   | 94 |
| ST 63-761 TOP       | D/GB | 72010-015.00   | SM   | CUC 6365   | 94 |
| ST 63-761/9 TOP     | D/GB | 72010-015.00   | SM   | CUC 6365   | 94 |
| ST 63-780 NIC/TOP   | D/GB | 72010-020.70   | SM   | CUC 2031 N | 97 |
| ST 63-780 text      | D/GB | 72010-020.70   | SM   | CUC 2031   | 97 |
| ST 63-781 IDTV      | D/GB | 72010-014.20   | SM   | CUC 1823   | 93 |
| ST 63-800 TOP/LOG   | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06<br>72010-015.07 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.<br>7. Supp. | CUC 6360   | 96 |
| ST 63-800/9 TOP/LOG | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06<br>72010-015.07 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.<br>7. Supp. | CUC 6360   | 96 |
| ST 70-100 IDTV      | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                                     | CUC 1824   | 95 |
| ST 70-150 IDTV      | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                                     | CUC 1824   | 95 |
| ST 70-155 IDTV      | D/GB | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1824   | 94 |

| Set                  |      | Part.No.   | Тур  | CUC        |    |
|----------------------|------|--|--|------------|----|
| ST 70-155/9 IDTV     | D/GB | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1822   | 94 |
| ST 70-160 IDTV       | D/GB | 72010-014.21<br>72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 1824   | 95 |
| ST 70-160/9 IDTV     | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 1824   | 95 |
| ST 70-169 TOP        | D/GB | 72010-013.50   | SM   | CUC 7951   | 93 |
| ST 70-169/9 TOP      | D/GB | 72010-013.50   | SM   | CUC 7951   | 93 |
| ST 70-255 IDTV/LOG   | D/GB | 72010-019.30   | SM   | CUC 1825   | 96 |
| ST 70-255/8 IDTV/LOG | D/GB | 72010-019.30   | SM   | CUC 1825   | 96 |
| ST 70-270 IDTV       |      | 72010-019.30<br>72010-019.31<br>72010-019.32<br>72010-019.33   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                         | CUC 1825   | 97 |
| ST 70-270/8 IDTV     |      | 72010-019.30<br>72010-019.31<br>72010-019.32<br>72010-019.33   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                         | CUC 1825   | 97 |
| ST 70-550/8 text     | D/GB | 72010-011.40   | SM   |            | 92 |
| ST 70-650 text       | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 70-650/8 text     | D/GB | 72010-011.40   | SM   | CUC 5360   | 92 |
| ST 70-651/9 TOP      | D/GB | 72010-015.00   | SM   | CUC 6360   | 94 |
| ST 70-655/8 FT/GB    | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 70-655/8 TOP      | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 70-657 TOP        | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 70-665 text       | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360   | 92 |
| ST 70-670 TOP        | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| ST 70-670/8 TOP      | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5361   | 92 |
| ST 70-675 TOP        | D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 5361   | 94 |
| ST 70-700 FR         | F/GB | 72010-020.80   | SM   | CUC 2030   | 97 |
| ST 70-700 NIC/FT     | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.   | CUC 2030 N | 97 |
| ST 70-700 NIC/text   | D/GB | 72010-020.70   | SM   | CUC 2030 N | 97 |
| ST 70-700 NIC/TOP    | D/GB | 72010-020.70   | SM   | CUC 2030 N | 97 |
| ST 70-700 text       | D/GB | 72010-020.70   | SM   | CUC 2030   | 97 |
| ST 70-705 TOP        | D/GB | 72010-015.00   | SM   | CUC 6360   | 94 |
| ST 70-705/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.   | CUC 6330   | 95 |

| Set                  |      | Part.No.   | Тур  | CUC               |    |
|----------------------|------|--|--|-------------------|----|
| ST 70-705/9 TOP      | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02                                 | SM<br>1. Supp.<br>2. Supp.                         | CUC 6360          | 95 |
| ST 70-705/9 TOP/LOG  | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp. | CUC 6360          | 95 |
| ST 70-710 DPL/NIC/FT | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.                                     | CUC 2040 N        | 97 |
| ST 70-710 NIC/text   | D/GB | 72010.020.70<br>72010.020.71   | SM<br>1. Supp.                                     | CUC 2030 N        | 97 |
| ST 70-720/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.                                     | CUC 6330          | 96 |
| ST 70-721/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.                                     | CUC 6330          | 96 |
| ST 70-725/8 FT/GB    | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.                                     | CUC 6330          | 96 |
| ST 70-725/8 text     | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.                                     | CUC 6330          | 96 |
| ST 70-728 text       | D/GB | 72010-016.90<br>72010-016.91   | SM<br>1. Supp.                                     | CUC 6330          | 96 |
| ST 70-745 text       | D/GB | 72010-016.90   | SM   | CUC 6330          | 94 |
| ST 70-750 text       | D/GB | 72010-016.90   | SM   | CUC 6330          | 95 |
| ST 70-750/9 TOP      | D/GB | 72010-015.00<br>72010-015.01   | SM<br>1. Supp.                                     | CUC 6360          | 95 |
| ST 70-755 TOP LOG    | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.             | CUC 6360          | 94 |
| ST 70-755 TOP+SAT    | D/GB | 72010-015.00   | SM   | D/F/I<br>CUC 6360 | 94 |
| ST 70-755/9 TOP      | D/GB | 72010-015.00   | SM   | CUC 6360          | 94 |
| ST 70-755/9 TOP LOG  | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp. | CUC 6360          | 94 |
| ST 70-755/9/DPL/LOG  | D/GB | 72010-018.70   | SM   | CUC 6469          | 96 |
| ST 70-760 TOP/LOG    | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp. | CUC 6360          | 95 |
| ST 70-770 text       | D/GB | 72010-016.90<br>72010-016.91<br>72010-016.92<br>72010-016.93                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.             | CUC 6330          | 94 |
| ST 70-778 text       | D/GB | 72010-016.90<br>72010-016.91<br>72010-016.92<br>72010-016.93<br>72010-016.94 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp. | CUC 6330          | 94 |
| ST 70-780 FR /TOP    | F/GB | 72010-020.80   | SM   | CUC 2030          | 97 |
| ST 70-780 NIC/TOP    | D/GB | 72010-020.70   | SM   | CUC 2030 N        | 97 |
| ST 70-780 text       | D/GB | 72010-020.70   | SM   | CUC 2030 N        | 97 |

| Set                |      | Part.No.   | Тур  | CUC      |    |
|--------------------|------|--|--|----------|----|
| ST 70-800 TOP/LOG  | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.             | CUC 6360 | 96 |
| ST 70-800/9 TOP/LO | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.             | CUC 6360 | 96 |
| ST 70-809          | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06<br>72010-015.07 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.<br>7. Supp. | CUC 6360 | 96 |
| ST 70-869 IDTV     | D/GB | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | CUC 1826 | 96 |
| ST 70-907 text     | D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp.   | CUC 5360 | 94 |
| ST 70-93 text      | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360 | 92 |
| ST 70-94 text      | D/GB | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.   | CUC 5360 | 94 |
| ST 70-95 TOP       | D/GB | 72010-015.00<br>72010-015.01<br>72010-015.02   | SM<br>1. Supp.<br>2. Supp.   | CUC 6360 | 95 |
| ST 70-97 IDTV      |      | 72010-019.30<br>72010-019.31<br>72010-019.32   | SM<br>1. Supp.<br>2. Supp.   | CUC 1825 | 97 |
| ST 7003            | D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp.   | CUC 5360 | 93 |
| ST 7003/8          | D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42   | SM<br>1. Supp.<br>2. Supp.   | CUC 5360 | 93 |
| ST 7004            | D/GB | 72010-015.00   | SM   | CUC 6360 | 94 |
| ST 72-01 IDTV      | D/GB | 72010-019.30<br>72010-019.31<br>72010-019.32<br>72010-019.33   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.   | CUC 1826 | 97 |
| ST 72-160 IDTV     | D/GB | 72010-014.20   | SM   | CUC 1822 | 93 |
| ST 72-160/9 IDTV   | D/GB | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | CUC 1822 | 94 |
| ST 72-161 IDTV     | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22   | SM<br>1. Supp.<br>2. Supp.   | CUC 1822 | 95 |
| ST 72-161/9 IDTV   | D/GB | 72010-014.20<br>72010-014.21<br>72010-014.22   | SM<br>1. Supp.<br>2. Supp.   | CUC 1822 | 95 |
| ST 72-1772 TOP     | D/GB | 72010-015.00   | SM   | CUC 6365 | 94 |
| ST 72-1772/9 TOP   | D/GB | 72010-015.00   | SM   | CUC 6365 | 94 |

| Set                            | Part.No.                                     | Тур                        | CUC              |    |
|--------------------------------|--|----------------------------|------------------|----|
| ST 72-261 IDTV/LOG D/GB        | 72010-019.30                                 | SM                         | CUC 1825         | 96 |
| ST 72-261/8 IDTV/LOG D/GB      | 72010-019.30                                 | SM                         | CUC 1826         | 96 |
| ST 72-261/8 IDTV/LOG D/GB      | 72010-019.30                                 | SM<br>1. Supp.             | CUC 1826         | 96 |
| ST 72-760 MD/TOP D/GB          | 72010-014.00                                 | SM                         | CUC 5365         | 94 |
| ST 72-760 text D/GB            | 72010-016.90<br>72010-016.91                 | SM<br>1. Supp.             | CUC 6331         | 96 |
| ST 72-760 TOP D/GB             | 72010-014.00                                 | SM                         | CUC 5365         | 93 |
| ST 72-760/8 text D/GB          | 72010-016.90<br>72010-016.91                 | SM<br>1. Supp.             | CUC 6331         | 96 |
| ST 72-760/8 TOP D/GB           | 72010-014.00                                 | SM                         | CUC 5365         | 93 |
| ST 72-761 SAT D/GB             | 72010-014.00                                 | SM                         | CUC 6365         | 94 |
| ST 72-761/9 TOP D/GB           | 72010-015.00                                 | SM                         | CUC 6365         | 94 |
| ST 72-762 TOP D/GB             | 72010-015.00<br>72010-015.01                 | SM<br>1. Supp.             | CUC 6365         | 95 |
| ST 72-762/9 TOP D/GB           | 72010-015.00<br>72010-015.01                 | SM<br>1. Supp.             | CUC 6365         | 95 |
| ST 72-764 SAT D/GB             | 72010-014.10                                 | SM                         | CUC 7820         | 93 |
| ST 72-860 FR /TOP F/GB         | 72010-020.80                                 | SM                         | CUC 2031 F       | 97 |
| ST 72-860 NIC/TOP D/GB         | 72010-020.70                                 | SM                         | CUC 2031 N       | 97 |
| ST 72-860 TOP D/GB             | 72010-020.70                                 | SM                         | CUC 2031         | 97 |
| ST 72-865 NIC/TOP D/GB         | 72010.020.70<br>72010.020.71                 | SM<br>1. Supp.             | CUC 2031 N       | 97 |
| ST 82-775 TOP D/GB             | 72010-013.10                                 | SM                         |                  | 92 |
| ST 82-775/9 PIP/TOP D/GB       | 72010-013.10                                 | SM                         | CUC<br>7880/7890 | 92 |
| ST 82-775/9 TOP D/GB           | 72010-013.10                                 | SM                         | CUC<br>7880/7890 | 92 |
| ST 84-796/9 TOP/LOG D/GB       | 72010-017.70                                 | SM                         | CUC 6380         | 94 |
| ST 95-775/9 PIP/TOP D/GB       | 72010-013.10                                 | SM                         | CUC<br>7880/7890 | 92 |
| STC 400 EV D/GB                | 72010-011.90                                 | SM                         |                  | 92 |
| STC 43 D/GB                    | 72010-019.70                                 | SM                         |                  | 92 |
| STC 45 D/GB                    | 72010-019.70                                 | SM                         |                  | 92 |
| STC 80 D/GB                    | 72010-018.60<br>72010-018.61                 | SM<br>1. Supp.             |                  | 97 |
| STC 850 STC 800/0 D/GB         | 72010-015.50                                 | SM                         |                  | 95 |
| STC 1600 D/GB                  | 72010-015.90                                 | SM                         |                  | 95 |
| STC 1600/0 D/GB                | 72010-015.90                                 | SM                         |                  | 95 |
| STC 1650 D/GB                  | 72010-018.00                                 | SM                         |                  | 96 |
| STE 1000 D/GB                  | 72010-019.00                                 | SM                         | 0110 0000        | 96 |
| STEELER D/GB                   | 72010-013.60                                 | SM                         | CUC 6300         | 93 |
| STEELER GB D/GB                | 72010-013.60                                 | SM                         | CUC 6300         | 93 |
| Stockholm ST 1670 text D/GB    | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5361         | 92 |
| Stockholm ST 2670 TEXT D/GB    | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5361         | 92 |
| Stockholm ST 3670 TEXT<br>D/GB | 72010-011.40<br>72010-011.41<br>72010-011.42 | SM<br>1. Supp.<br>2. Supp. | CUC 5360         | 93 |
| STR 100 DX D/GB                | 72010-021.00                                 | SM                         |                  | 97 |

| Set                               | Part.No.   | Тур  | CUC      |    |
|-----------------------------------|--|--|----------|----|
| STR 100 FR MicroSAT D/GB          | 72010-019.20   | SM   |          | 96 |
| STR 100 MicroSAT D/GB             | 72010-018.20   | SM   |          | 96 |
| STR 110 DX D/GB                   | 72010-020.90   | SM   |          | 97 |
| STR 211 D/GB                      | 72010-012.30   | SM   |          | 92 |
| STR 310 D/GB                      | 72010-015.80   | SM   |          | 95 |
| STR 310/1 D/GB                    | 72010-015.80   | SM   |          | 95 |
| STR 311 D+FR D/GB/F               | 72010-013.90   | SM   |          | 93 |
| STR 312 D+FR D/GB/F               | 72010-013.90   | SM   |          | 93 |
| STR 320 D/GB                      | 72010-015.80   | SM   |          | 95 |
| STR 320/1 D/GB                    | 72010-015.80   | SM   |          | 95 |
| STR 322 TWIN D/GB                 | 72010-016.30   | SM   |          | 95 |
| STR 322 TWIN FR F/GB              | 72010-017.90   | SM   |          | 95 |
| STR 325 D/GB                      | 72010-015.80   | SM   |          | 95 |
| STR 400 AP D/GB                   | 72010-014.40   | SM   |          | 93 |
| STR 410 D/GB                      | 72010-015.80<br>72010-015.81   | SM<br>1. Supp.                                     |          | 95 |
| STR 420 D/GB                      | 72010-015.80<br>72010-015.81   | SM<br>1. Supp.                                     |          | 95 |
| STR 501 D/GB                      | 72010-018.30   | SM   |          | 95 |
| STR 501 FR F/GB                   | 72010-018.40   | SM   |          | 95 |
| STR 502 D/GB                      | 72010-018.30   | SM   |          | 95 |
| STR 502 FR F/GB                   | 72010-018.40   | SM   |          | 95 |
| STR 511 D/GB                      | 72010-016.70   | SM   |          | 95 |
| STR 511 FR F/GB                   | 72010-018.10   | SM   |          | 95 |
| STR 512 D/GB                      | 72010-016.70   | SM   |          | 95 |
| STR 512 FR F/GB                   | 72010-018.10   | SM   |          | 95 |
| STR 535 N MAC D/GB                | 72010-018.00   | SM   |          | 96 |
| STR 600 AP D/GB                   | 72010-021.20   | SM   |          | 97 |
| STR 622 TWIN D/GB                 | 72010-021.30   | SM   |          | 97 |
| STR 631 D/GB                      | 72010-020.30   | SM   |          | 96 |
| STR 631 D/GB                      | 72010-020.30   | SM   |          | 97 |
| STR 631 FR F/GB                   | 72010-020.40   | SM   |          | 97 |
| STR 632 D/GB                      | 72010-020.30   | SM   |          | 96 |
| STR 632 D/GB                      | 72010-020.30   | SM   |          | 97 |
| STR 632 FR F/GB                   | 72010-020.40   | SM   |          | 97 |
| STR 641 + FR D/GB/F               | 72010.020.30<br>72010.020.31   | SM<br>1. Supp.                                     |          | 97 |
| STR 642 + FR D/GB/F               | 72010.020.30<br>72010.020.31   | SM<br>1. Supp.                                     |          | 97 |
| Sydney 72 ST 1772 D/GB<br>TOP/LOG | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp. | CUC 6360 | 95 |
| Sydney 72 ST 772 TOP              | 72010-014.00   | SM   | CUC 5365 | 93 |
| Sydney 72 ST 772/8 TOP            | 72010-014.00   | SM   | CUC 5365 | 93 |
| Sydney S ST 2670 TOP D/GB         | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.                                     | CUC 5361 | 92 |
| Sydney S ST 2670/8 TOP            | 72010-011.40<br>72010-011.41   | SM<br>1. Supp.                                     | CUC 5361 | 92 |

| Set                        |              | Part.No.                                     | Тур                        | CUC        |    |
|----------------------------|--------------|--|----------------------------|------------|----|
| Sydney ST 72-772 T         | OP D/GB      | 72010-014.00                                 | SM                         | CUC 5365   | 93 |
| Sydney ST 72-772/8         | TOP          | 72010-014.00                                 | SM                         | CUC 5365   | 93 |
| Sydney ST 872 text         | D/GB         | 72010-016.90<br>72010-016.91                 | SM<br>1. Supp.             | CUC 6331   | 96 |
| Sydney ST 872/8 tex        | t D/GB       | 72010-016.90<br>72010-016.91                 | SM<br>1. Supp.             | CUC 6331   | 96 |
| Sydney100 SE 7020<br>D/GB  | IDTV/LOG     | 72010-019.30<br>72010-019.31<br>72010-019.32 | SM<br>1. Supp.<br>2. Supp. | CUC 1826   | 97 |
| Sydney100/8 SE 702<br>D/GB | 0/8 IDTV/LOG | 72010-019.30<br>72010-019.31<br>72010-019.32 | SM<br>1. Supp.<br>2. Supp. | CUC 1826   | 97 |
| T 20-6210/4 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 20-6210/6                | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 20-6210/6 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 20-6210/8                | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 20-6210/8 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/4                | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/4 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/6                | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/6 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/8                | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 21-6210/8 text           | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 44-64/ASIS               | D/GB         | 72010-014.80<br>72010-014.81                 | SM<br>1. Supp.             | CUC 6301   | 95 |
| T 45-845 FR                | F/GB         | 72010-016.60                                 | SM                         | CUC 7300 F | 95 |
| T 51-040 P/S               | D/GB         | 72010-012.60                                 | SM                         | CUC 5303   | 92 |
| T 51-050                   | D/GB         | 72010-012.60                                 | SM                         | CUC 5303   | 92 |
| T 51-050 OIRT              | D/GB         | 72010-012.60                                 | SM                         | CUC 5303   | 92 |
| T 51-060                   | D/GB         | 72010-013.60                                 | SM                         | CUC 6300   | 93 |
| T 51-070                   | D/GB         | 72010-017.80<br>72010-017.81                 | SM<br>1. Supp.             | CUC 7301   | 95 |
| T 51-071                   | D/GB         | 72010-019.40                                 | SM                         | CUC 7303   | 96 |
| T 51-3035 text             | D/GB         | 72010-019.40<br>72010-019.41<br>72010-019.42 | SM<br>1. Supp.<br>2. Supp. | CUC 7303   | 97 |
| T 51-640 FT/GB             | D/GB         | 72010-013.60                                 | SM                         | CUC 6300   | 94 |
| T 51-640 text              | D/GB         | 72010-013.60                                 | SM                         | CUC 6300   | 93 |
| T 51-640a text             | D/GB         | 72010-013.60<br>72010-013.61<br>72010-013.62 | SM<br>1. Supp.<br>2. Supp. | CUC 6300   | 93 |
| T 51-711 text              | D/GB         | 72010-017.80<br>72010-017.81                 | SM<br>1. Supp.             | CUC 7301   | 94 |
| T 51-720 text              | D/GB         | 72010-019.40                                 | SM                         | CUC 7303   | 96 |
| T 51-720 text/GB           | D/GB         | 72010-019.40                                 | SM                         | CUC 7303   | 96 |
| T 51-721/5                 | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |
| T 51-721/5 text            | D/GB         | 72010-019.80                                 | SM                         | CUC 400    | 96 |

| Set                       | Part.No.   | Тур  | CUC        |    |
|---------------------------|--|--|------------|----|
| T 51-730 MegASIS D/GB     | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301   | 97 |
| T 51-730 MegASIS D/GB     | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301   | 97 |
| T 51-730 text D/GB        | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 94 |
| T 51-730 text ASIS D/GB   | 72010-017.80<br>72010-017.81<br>72010-017.82   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7301   | 96 |
| T 51-730/5 MegASIS D/GB   | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301   | 97 |
| T 51-730/5 text D/GB      | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 95 |
| T 51-730/5 text ASIS D/GB | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 93 |
| T 51-731 text             | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 51-731/5 text           | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 95 |
| T 51-732/5 text           | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 51-843 FR               | 72010-017.70   | SM   | CUC 7301 F | 94 |
| T 51-846 FR               | 72010-019.60   | SM   | CUC 7303 F | 96 |
| T 55-050                  | 72010-012.60   | SM   | CUC 5303   | 92 |
| T 55-060                  | 72010-013.60   | SM   | CUC 6300   | 93 |
| T 55-3035 D/GB            | 72010-019.40<br>72010-019.41<br>72010-019.42<br>72010-019.43                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                         | CUC 7303   | 97 |
| T 55-3035 text D/GB       | 72010-019.40<br>72010-019.41<br>72010-019.42   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7303   | 97 |
| T 55-540 ASIS             | 72010-012.70   | SM   | CUC 5301   | 92 |
| T 55-540 DS / ASIS        | 72010-012.70   | SM   | CUC 5301   | 92 |
| T 55-546 text             | 72010-010.50<br>72010-010.51   | SM<br>1. Supp.   | CUC 5301   | 92 |
| T 55-64 FR/FM/CL          | 72010-016.40   | SM   | CUC 6301 F | 95 |
| T 55-64/4 ASIS            | 72010-014.80<br>72010-014.81   | SM<br>1. Supp.   | CUC 6301   | 96 |
| T 55-64/4 FM/CL D/GB/I    | 72010-014.80   | SM   | CUC 6301   | 94 |
| T 55-640 FT/GB            | 72010-013.60   | SM   | CUC 6300   | 93 |
| T 55-640 l/text           | 72010-013.60   | SM   | CUC 6300   | 93 |
| T 55-640 OIRT             | 72010-013.60   | SM   | CUC 6300   | 93 |
| T 55-640 text             | 72010-013.60<br>72010-013.61   | SM<br>1. Supp.   | CUC 6300   | 93 |

| Set                  |      | Part.No.   | Тур  | cuc        |    |
|----------------------|------|--|--|------------|----|
| T 55-645 text        | D/GB | 72010-017.60   | SM   | G 1000     | 94 |
| T 55-645 text        | D/GB | 72010-017.60   | SM   | G 1000     | 95 |
| T 55-730             | D/GB | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 94 |
| T 55-730 MegASIS     | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301   | 97 |
| T 55-730 text        | D/GB | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 96 |
| T 55-730 text /GB    | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7301   | 96 |
| T 55-730 text ASIS   | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7301   | 96 |
| T 55-730/5 MegASIS   | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | CUC 7301   | 97 |
| T 55-730/5 text      | D/GB | 72010-017.80<br>72010-017.81   | SM<br>1. Supp.   | CUC 7301   | 94 |
| T 55-730/5 text ASIS | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7301   | 96 |
| T 55-730/5 text ICN  | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.             | CUC 7301   | 97 |
| T 55-731 FT/GB       | D/GB | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 55-731 FT/IR       | D/GB | 72010-019.40<br>72010-019.41<br>72010-019.42   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7303   | 96 |
| T 55-731 text        | D/GB | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 55-731/5 text      | D/GB | 72010-017.80<br>72010-017.81<br>72010-017.82   | SM<br>1. Supp.<br>2. Supp.                                     | CUC 7301   | 96 |
| T 55-732/5 text      |      | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 55-733/5 text      |      | 72010-019.40   | SM   | CUC 7303   | 96 |
| T 55-740 SAT         |      | 72010-015.40   | SM   | CUC 7300   | 94 |
| T 55-740 TOP         |      | 72010-015.40   | SM   | CUC 7300   | 94 |
| T 55-740/6 TOP       | D/GB | 72010-017.40   | SM   | CUC 7302   | 94 |
| T 55-841 FR          | F/GB | 72010-019.60   | SM   | CUC 7303 F | 96 |
| T 55-843 FR          | F/GB | 72010-017.70   | SM   | CUC 7301 F | 94 |
| T 55-845 FR          | F/GB | 72010-016.60   | SM   | CUC 7300 F | 95 |
| T 55-846 FR          | F/GB | 72010-019.60<br>72010-019.61<br>72010-019.62   | SM   | CUC 7303 F | 97 |
| T 5570               | D/GB | 72010-017.60   | SM   | G 1000     | 94 |
| T 5570 text          | D/GB | 72010-017.60   | SM   | G 1000     | 94 |

| Set                    |             | Part.No.                                     | Тур                        | CUC                     |    |
|------------------------|-------------|--|----------------------------|-------------------------|----|
| T 63-640 A FT/GB       | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 63-640 A text        | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 63-640 DS            | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 63-640 FT/GB         | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 63-640 l/text D/GB   | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 63-640 OIRT          | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 63-640 text          | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 63-640 TF/E          | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 93 |
| T 70-549               | D/GB        | 72010-012.50                                 | SM                         | CUC 5312                | 92 |
| T 70-640 A FT/GB       | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 70-640 A text        | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 70-640 DS            | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 70-640 DS/TF/E       | D/GB        | 72010-011.00                                 | SM                         | CUC 5310                | 92 |
| T 70-640 FT/GB         | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 70-640 OIRT          | D/GB        | 72010-013.80                                 | SM                         | CUC 6310                | 93 |
| T 70-640 text          | D/GB        | 72010-011.00<br>72010-011.01                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| T 70-740 FT/GB         | D/GB        | 72010-013.80<br>72010-013.81                 | SM<br>1. Supp.             | CUC 6310                | 96 |
| T 70-740 text          | D/GB        | 72010-013.80<br>72010-013.81<br>72010-013.82 | SM<br>1. Supp.<br>2. Supp. | CUC 6310                | 96 |
| T 70-740/4 TOP         | D/GB        | 72010-013.80<br>72010-013.81<br>72010-013.82 | SM<br>1. Supp.<br>2. Supp. | CUC 6310                | 96 |
| T 70-843 FR            | F/GB        | 72010-018.30<br>72010-018.31                 | SM<br>1. Supp.             | CUC 5310                | 92 |
| Trento SE 7026 PALplus |             | 72010.019.90<br>72010.019.91                 | SM<br>1. Supp.             | CUC 1952                | 97 |
| TV-MAX E 55-700 TOP/   | LOG         | 72010-017.50                                 | SM                         | CUC 6450                | 94 |
| TV-MAX E 55-700/9 TO   | P/LOG       | 72010-017.50                                 | SM                         | CUC 6450                | 94 |
| TVR 3700               | D/GB        | 72010-517.30                                 | SM                         |                         | 94 |
| TVR 3700 FR            | F/GB        | 72010-017.05                                 | SM                         |                         | 95 |
| WIEN S ST 1663 TOP     | D/GB        | 72010-011.40<br>72010-011.41<br>72010-011.42 | SM<br>1. Supp.<br>2. Supp. | D/GB/I/F/NL<br>CUC 5361 | 94 |
| WIEN S ST 2663 TOP     | D/GB        | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | D/GB/I/F/NL/<br>P       | 92 |
| WIEN S ST 2663/8 TOP   | D/GB        | 72010-011.40<br>72010-011.41                 | SM<br>1. Supp.             | CUC 5361                | 92 |
| Wien100 SE 6320 IDTV/  | LOG<br>D/GB | 72010-019.30<br>72010-019.31<br>72010-019.32 | SM<br>1. Supp.<br>2. Supp. | CUC 1826                | 97 |
| XC 701                 | D/GB        | 72010-015.00<br>72010-015.01<br>72010-015.02 | SM<br>1. Supp.<br>2. Supp. | CUC 5360                | 93 |
| XS 55                  | D/GB        | 72010-012.00<br>72010-012.01                 | SM<br>1. Supp.             | CUC 5350                | 93 |
| XS 55-1                | D/GB        | 72010-016.80                                 | SM<br>1. Supp.             | CUC 7350                | 94 |

| F | ١ | į |  |
|---|---|---|--|

| Set                       |      | Part.No.                     | Тур            | CUC      |    |
|---------------------------|------|------------------------------|----------------|----------|----|
| XS 55-9 D/GB 72010-016.80 |      | 72010-016.80                 | SM<br>1. Supp. | CUC 7350 | 94 |
| XS 55/8+FT/GB             | D/GB | 72010-012.00<br>72010-012.01 | SM<br>1. Supp. | CUC 5350 | 93 |
| XS 63                     | D/GB | 72010-011.40<br>72010-011.41 | SM<br>1. Supp. | CUC 6360 | 93 |
| XS 63/1                   | D/GB | 72010-011.40<br>72010-011.41 | SM<br>1. Supp. | CUC 6360 | 94 |
| XS 63/2                   | D/GB | 72010-016.90                 | SM             | CUC 6330 | 94 |
| XS 63/8+FT/GB             | D/GB | 72010-011.40<br>72010-011.41 | SM<br>1. Supp. | CUC 5360 | 93 |
| XS 63/81                  | D/GB | 72010-016.90<br>72010-016.91 | SM<br>1. Supp. | CUC 6330 | 96 |
| XS 63/9                   | D/GB | 72010-015.00                 | SM             | CUC 6360 | 94 |
| XS 70                     | D/GB | 72010-011.40<br>72010-011.41 | SM<br>1. Supp. | CUC 5361 | 93 |
| XS 70/1                   | D/GB | 72010-015.00                 | SM             | CUC 6360 | 94 |
| XS 70/8+FT/GB             | D/GB | 72010-011.40<br>72010-011.41 | SM<br>1. Supp. | CUC 5360 | 93 |
| XS 70/81                  | D/GB | 72010-016.90<br>72010-016.91 | SM<br>1. Supp. | CUC 6330 | 96 |
| XS 70/9                   | D/GB | 72010-015.00                 | SM             | CUC 6360 | 94 |

#### TV

# Service Manuals from 1992 onwards sorted by CUC

| CUC  | Part.No.   | Тур  |    |
|--|--|--|----|
| CUC 1805 DIGI BASIC  | 72010-019.30<br>72010-019.31<br>72010-019.32   | SM<br>1. Supp.<br>2. Supp.   | 96 |
| CUC 1821 DIGI 4  | 72010-012.90   | SM   | 92 |
| CUC 1822/23/52 DIGI 5<br>CUC 1822/24/82/93 DIGI 5<br>CUC 1800/22 DIGI 5<br>CUC 1824 DIGI 5<br>CUC 1822/24/52/82/93 DIGI 5<br>CUC 1822/24/52 DIGI 5<br>CUC 1822/52 DIGI 5 | 72010-014.20<br>72010-014.21<br>72010-014.22<br>72010-014.23<br>72010-014.24<br>72010-014.25<br>72010-014.26 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp. | 94 |
| CUC 1825 DIGI BASIC  | 72010-019.30<br>72010-019.31<br>72010-019.32<br>72010-019.33   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                                     | 96 |
| CUC 1826 DIGI BASIC  | 72010-019.30<br>72010-019.31<br>72010-019.32<br>72010-019.33   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.                                     | 96 |
| CUC 1827 DIGI BASIC +  | 72010-019.30<br>72010-019.31   | SM<br>1. Supp.   | 96 |
| CUC 1828 DIGI BASIC ++   | 72010-021.10   | SM   | 96 |
| CUC 1842 DIGI 6  | 72010-019.90   | SM   | 96 |
| CUC 1851 DIGI 4  | 72010-012.90   | SM   | 92 |
| CUC 1881 DIGI 4  | 72010-012.90   | SM   | 92 |
| CUC 1881 DIGI 4  | 72010-012.90<br>72010-012.91   | SM<br>1. Supp.   | 92 |
| CUC 1882 DIGI 5  | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | 94 |
| CUC 1892 DIGI 4  | 72010-012.90<br>72010-012.91   | SM<br>1. Supp.   | 92 |
| CUC 1892 DIGI 4  | 72010-012.90   | SM   | 92 |
| CUC 1893 DIGI 5  | 72010-014.20<br>72010-014.21   | SM<br>1. Supp.   | 94 |
| CUC 1894 DIGI 6  | 72010-019.90<br>72010-019.91<br>72010-019.92   | SM<br>1. Supp.<br>2. Supp.   | 96 |
| CUC 1951 DDIGI 5 / 16:9  | 72010-016.10   | SM   | 95 |
| CUC 1952 DIGI 6  | 72010-019.90<br>72010-019.91   | SM<br>1. Supp.   | 96 |
| CUC 1961 DIGI 5 / DPL  | 72010-018.90   | SM   | 96 |
| CUC 1981 DIGI 4 PAL PLUS   | 72010-016.00<br>72010-016.01   | SM<br>1. Supp.   | 95 |
| CUC 1982 DIGI 5 / 16:9   | 72010-016.10   | SM   | 95 |
| CUC 1983 DIGI 6  | 72010-019.90<br>72010-019.91<br>72010-019.92   | SM<br>1. Supp.<br>2. Supp.   | 96 |
| CUC 1984 DIGI 6  | 72010-019.90<br>72010-019.91<br>72010-019.92   | SM<br>1. Supp.<br>2. Supp.   | 96 |
| CUC 2030 / N 2031 / N  | 72010-020.70<br>72010-020.71   | SM<br>1. Supp.   | 96 |
| CUC 2030 FR  | 72010-020.80   | SM<br>1. Supp.   | 96 |
| CUC 2040 / N   | 72010-020.70<br>72010-020.71   | SM<br>1. Supp.   | 96 |
| CUC 5200   | 72010-013.00   | SM   | 92 |

| cuc                | Part.No.   | Тур  |    |
|--------------------|--|--|----|
| CUC 5302 ASIS      | 72010-013.40   | SM   | 92 |
| CUC 5303           | 72010-012.60   | SM   | 92 |
| CUC 5312           | 72010-012.50   | SM   | 92 |
| CUC 5350 F         | 72010-016.20<br>72010-016.21   | SM<br>1. Supp.   | 95 |
| <br>CUC 5365       | 72010-014.00   | SM   | 94 |
| CUC 5371           | 72010-013.20   | SM   | 92 |
| CUC 6300           | 72010-013.60<br>72010-013.61<br>72010-013.62   | SM<br>1. Supp.<br>2. Supp.   | 93 |
| CUC 6301 F         | 72010-016.40   | SM   | 95 |
| CUC 6301+ ASIS     | 72010-014.80<br>72010-014.81   | SM<br>1. Supp.   | 94 |
| CUC 6310           | 72010-013.80<br>72010-013.81<br>72010-013.82   | SM<br>1. Supp.<br>2. Supp.   | 93 |
| CUC 6310 F         | 72010-018.30<br>72010-018.31   | SM<br>1. Supp.   | 93 |
| CUC 6330/6331      | 72010-016.90<br>72010-016.91<br>72010-016.92<br>72010-016.93<br>72010-016.94   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.                                     | 94 |
| CUC 6360/6361/6365 | 72010-015.00<br>72010-015.01<br>72010-015.02<br>72010-015.03<br>72010-015.04<br>72010-015.05<br>72010-015.06<br>72010-015.07 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.<br>6. Supp.<br>7. Supp. | 94 |
| CUC 6380           | 72010-017.70   | SM   | 94 |
| CUC 6450           | 72010-017.50   | SM   | 94 |
| CUC 6469           | 72010-018.70   | SM   | 94 |
| CUC 7300           | 72010-015.40<br>72010-015.41<br>72010-015.42   | SM<br>1. Supp.<br>2. Supp.   | 94 |
| CUC 7300 F         | 72010-016.60A  | SM   | 95 |
| CUC 7301           | 72010-017.80<br>72010-017.81<br>72010-017.82<br>72010-017.83<br>72010-017.84<br>72010-017.85                                 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp.                         | 93 |
| CUC 7301 F         | 72010-018.50   | SM   | 93 |
| CUC 7302           | 72010-017.40   | SM   | 93 |
| CUC 7303           | 72010-019.40<br>72010-019.41<br>72010-019.42<br>72010-019.43   | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.   | 96 |
| CUC 7303 F         | 72010-019.60<br>72010-019.61<br>72010-019.62   | SM<br>1. Supp.<br>2. Supp.   | 96 |
| CUC 7305           | 72010-019.50   | SM   | 96 |

| cuc           | Part.No.   | Тур  |    |
|---------------|--|--|----|
| CUC 7350      | 72010-016.80<br>72010-016.81<br>72010-016.82<br>72010-016.83<br>72010-016.84<br>72010-016.85 | SM<br>1. Supp.<br>2. Supp.<br>3. Supp.<br>4. Supp.<br>5. Supp. | 93 |
| CUC 7820      | 72010-014.10   | SM   | 93 |
| CUC 7851      | 72010-013.70   | SM   | 93 |
| CUC 7861      | 72010-014.70   | SM   | 94 |
| CUC 7880/7890 | 72010-013.10<br>72010-013.11   | SM<br>1. Supp.   | 93 |
| CUC 7951      | 72010-013.50   | SM   | 93 |

# **Contents: Video**

| Module Chart:                               |       |
|---|-------|
| GV 200 to GV 280 S (Germany)                | . 3.2 |
| GV 200 to GV 280 S (Export)                 | . 3.3 |
| GV 400 to GV 437                            | . 3.5 |
| GV 4000 to GV 4200                          | . 3.7 |
| GV 440 to GV 470                            | . 3.8 |
| GV 500 to GV 565                            | . 3.9 |
| GV 5000 to GV 5695                          | 3.10  |
| GV 201-1, GV 25, GV 45, KV 5, SE 51         | 3.11  |
| GV 600 to GV 690                            | 3.12  |
| GV 6000 to GV 6596                          | 3.12  |
| GVP 600, GV 26, GV 46, SE 61                | 3.12  |
| Headwheels and Head Cylinders               | 3.13  |
| Service Manuals:                            |       |
| GV 200 to GV 280                            | 3.15  |
| GV 400 to GV 470                            | 3.16  |
| GV 25, GV26, GV45+GV46                      | 3.17  |
| GV 5  | 3.18  |
| GV 6  | 3.19  |
| GV 7  | 3.20  |
| TVR-Geräte                                  | 3.21  |
| Survey of Remote Control Handsets           | 3.22  |
| Video Remote Control Codes:                 |       |
| Video 2000 to VS 960                        | 3.26  |
| GV 200 to GV 470                            | 3.27  |
| GV 500 to GV 560                            | 3.28  |
| GV 600 to GV 690                            | 3.29  |
| Continuous Operation and Special Functions: |       |
| GV 200 to GV 280                            |       |
| GV 400 to GV 4192                           | 3.31  |
| GV 420 to GV 470                            | 3.32  |
| GV 500 to GV 565                            | 3.34  |
| GV 5000 to GV 5695                          | 3.35  |
| GV 25, GV45, KV 5, SE 51                    | 3.36  |
| GV 600 to GV 690                            |       |
| GV 6000 to GV 6596                          | 3.38  |
| GVP 600, GV 26, GV 46, SE 61                |       |
| Cancelling the Electronic Lock              | 3.40  |
| Measuring and Adjustment Equipment/Aids     | 3 46  |

Video

# Module Chart GV 200 to GV 280 S (Germany)

| Bezeichnung Designation (PCB)  Sachnummer Part No.  OR SOLUTION SO |                      |              |        | S | Sc |    | S |   | လွ |    | <u> </u> | Ţ  | F   | <u>_</u> | ЪŢ       | _  | F   |    | T    | ЪŢ | O   |
|--|----------------------|--------------|--------|---|----|----|---|---|----|----|----------|----|-----|----------|----------|----|-----|----|------|----|-----|
| Archive 27/505-108.01 Archive 27/506-051.01 Cyboard Control 27/506-052.01 Keyboard Control 27/506-063.01 Keyboard Control 27/506-073.01 Keyboard Control 27/506-077.01 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.03 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.02 Video Head Amplifier 27/506-041.02 Video Head Amplifier 27/506-072.01 Video Head Amp |                      |              |        | Ŋ | 5  | Ϋ́ | Ą |   | >  |    | ΛP       | 7  | >   | ΛP       | <u> </u> | ΛP | >   |    | ٧P   | >  | ď   |
| Archive 27/505-108.01 Archive 27/506-051.01 Cyboard Control 27/506-052.01 Keyboard Control 27/506-063.01 Keyboard Control 27/506-073.01 Keyboard Control 27/506-077.01 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.03 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.02 Video Head Amplifier 27/506-041.02 Video Head Amplifier 27/506-072.01 Video Head Amp | Designation (PCB)    | Part No.     | 0      | 0 | 95 | 7  | 4 | 0 | 8  | 1  | 20       | 20 | 392 | 30       | 392      | 0  | 192 | 20 | 50 ' | 8  | 808 |
| Archive 27/505-108.01 Archive 27/506-051.01 Cyboard Control 27/506-052.01 Keyboard Control 27/506-063.01 Keyboard Control 27/506-073.01 Keyboard Control 27/506-077.01 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.03 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.02 Video Head Amplifier 27/506-041.02 Video Head Amplifier 27/506-072.01 Video Head Amp |                      |              | 2      | 7 | 7  | 2  | 2 | 7 | 21 | 21 | 22       | 21 | 22  | 2        | 23       | 7  | 5   | 25 | 25   | 5  | 2   |
| Archive 27/505-108.01 Archive 27/506-051.01 Cyboard Control 27/506-052.01 Keyboard Control 27/506-063.01 Keyboard Control 27/506-073.01 Keyboard Control 27/506-077.01 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 27/506-077.02 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.01 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.02 Keyboard Control 1 27/506-055.03 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-055.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.01 Keyboard Control 2 27/506-056.02 Video Head Amplifier 27/506-041.02 Video Head Amplifier 27/506-072.01 Video Head Amp |                      |              | G<br>G | 9 | 9  | 9  | 9 | 9 | SE | GΛ | G        | SE | G   | G        | GΛ       | G  | 9   | GΛ | GΛ   | 9  | 9   |
| Keyboard Control         27506-052.01           Keyboard Control         27506-063.01           Keyboard Control         27506-073.01           Keyboard Control         27506-073.01           Keyboard Control         27506-077.01           Keyboard Control         27506-077.01           Keyboard Control         27506-077.02           Keyboard Control         27506-08.01           Keyboard Control         27506-055.01           Keyboard Control         27506-055.02           Keyboard Control         27506-055.02           Keyboard Control         27506-055.03           Keyboard Control         27506-055.03           Keyboard Control         27506-056.02           Keyboard Control         27506-056.03           Keyboard Control         27506-056.01           Keyboard Control         27506-056.02           Video Head Amplifier         27506-056.02           Video Head Amplifier         27506-056.02           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-071.01           Chassis Board         27506-041.03           Chassis Bo   | Archive              | 27505-108.01 |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
| Keyboard Control   | Archive              | 27506-051.01 |        |   |    |    |   |   |    |    |          |    |     | •        | •        |    |     |    | •    |    |     |
| Keyboard Control         27506-073.01         ◆  | Keyboard Control     | 27506-052.01 |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     | •  | •    |    | П   |
| Keyboard Control         27506-073.01         ●  | Keyboard Control     | 27506-053.01 |        |   |    |    |   |   |    |    |          |    |     |          |          | •  |     |    |      |    |     |
| Keyboard Control         27506-077.01           Keyboard Control         27506-077.02           Keyboard Control         27506-077.02           Keyboard Control 1         27506-055.01           Keyboard Control 1         27506-055.01           Keyboard Control 1         27506-055.02           Keyboard Control 1         27506-055.03           Keyboard Control 2         27506-055.04           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.02           Keyboard Control 2         27506-056.02           Video Head Amplifier         27506-056.02           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.02           Video/Sound Head Amplifier         27506-072.02           Video/Sound Head Amplifier         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.03           Chassis Board         27506-041.05           Chassis Board         27506-061.03           Chassis Board         27506-071.06           Chassis Board         27506-071.06           Chassis Board         27506-071.06           Chassis Board         27506-071.06           Chassi   | Keyboard Control     | 27506-064.01 |        |   |    |    |   |   |    |    |          |    |     | •        |          |    |     |    |      |    | П   |
| Keyboard Control         27506-077.01           Keyboard Control 1         27506-028.01           Keyboard Control 1         27506-028.01           Keyboard Control 1         27506-055.02           Keyboard Control 1         27506-055.03           Keyboard Control 1         27506-055.03           Keyboard Control 2         27506-029.01           Keyboard Control 2         27506-055.04           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.02           Video Head Ampliffer         27506-056.01           Video Head Ampliffer         27506-072.01           Video Head Ampliffer         27506-072.02           Video Head Ampliffer         27506-072.02           Video Head Ampliffer         27506-072.01           Video Sound Head Ampliffer         27506-072.01           Chassis Board         27506-041.03           Chassis Board         27506-041.03           Chassis Board         27506-041.07   | Keyboard Control     | 27506-073.01 | •      | • |    | •  |   | • |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Keyboard Control         27506-077.02           Keyboard Control 1         27506-028.01           Keyboard Control 1         27506-055.01           Keyboard Control 1         27506-055.03           Keyboard Control 1         27506-055.03           Keyboard Control 2         27506-055.04           Keyboard Control 2         27506-029.01           Keyboard Control 2         27506-056.02           Video Head Amplifier         27506-048.02           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-031.01           Chassis Board         27506-041.03           Chassis Board         27506-041.03           Chassis Board         27506-041.07           Chassis Board         27506-061.02           Chassis Board         27506-061.03           Chassis Board         27506-071.04           Chassis Board         27506-071.04           Chassis Board         27506-071.04           Chassis Board         27506-071.05           Chassis Board         27506-071.06           Chassis Board         27506-071.07           Chassis Board <t< td=""><td></td><td>27506-074.01</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  |                      | 27506-074.01 |        |   |    |    |   |   |    | •  | •        |    |     |          |          |    |     |    |      |    |     |
| Keyboard Control 1         27506-028.01           Keyboard Control 1         27506-055.02           Keyboard Control 1         27506-055.02           Keyboard Control 1         27506-055.03           Keyboard Control 2         27506-055.04           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.02           Keyboard Control 2         27506-056.02           Video Head Amplifier         27506-065.01           Video Head Amplifier         27506-065.01           Video Head Amplifier         27506-072.01           Video Source         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.03           Chassis Board         27506-041.07           Chassis Board         27506-071.01           Chassis Board         27506-071.05   |                      | 27506-077.01 |        |   |    |    |   |   |    |    |          | •  |     |          |          |    |     |    |      |    |     |
| Keyboard Control 1         27506-055.02           Keyboard Control 1         27506-055.03           Keyboard Control 1         27506-055.03           Keyboard Control 2         27506-055.04           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.01           Keyboard Control 2         27506-056.02           Video Head Amplifier         27506-068.01           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.01           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.01           Chassis Board         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.03           Chassis Board         27506-061.02           Chassis Board         27506-071.01           Chassis Board         27506-071.01           Chassis Board         27506-071.08           <   |                      | 27506-077.02 |        |   |    |    |   |   | •  |    |          |    |     |          |          |    |     |    |      |    |     |
| Keyboard Control 1       27506-055.02       ■       <  |                      | 27506-028.01 |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
| Keyboard Control 1       27506-055.03       ■         Keyboard Control 2       27506-055.04       ■         Keyboard Control 2       27506-056.01       ■         Keyboard Control 2       27506-056.02       ■         Video Head Amplifier       27506-056.02       ■         Video Head Amplifier       27506-065.01       ■         Video Head Amplifier       27506-072.01       ■         Video Head Amplifier       27506-072.02       ■         Video Head Amplifier       27506-072.02       ■         Video/Sound Head Amplifier       27506-072.01       ■         Field Store       27506-031.01       ■         Chassis Board       27506-041.02       ■         Chassis Board       27506-041.03       ■         Chassis Board       27506-041.07       ■         Chassis Board       27506-041.07       ■         Chassis Board       27506-061.02       ■         Chassis Board       27506-071.01       ■         Chassis Board       27506-071.03       ■         Chassis Board       27506-071.04       ■         Chassis Board       27506-071.07       ■         Chassis Board       27506-071.07       ■   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    | •   |    |      |    |     |
| Keyboard Control 1       27506-055.04       ●       <  |                      | 27506-055.02 |        |   |    |    | • |   |    |    |          |    | •   |          |          |    |     |    |      |    |     |
| Keyboard Control 2       27506-029.01         Keyboard Control 2       27506-056.02         Video Head Amplifier       27506-065.01         Video Head Amplifier       27506-065.01         Video Head Amplifier       27506-065.01         Video Head Amplifier       27506-072.02         Video Head Amplifier       27506-072.02         Video Head Amplifier       27506-072.02         Video Head Amplifier       27506-072.02         Video Sound Head Amplifier       27506-071.01         Chassis Board       27506-031.01         Chassis Board       27506-041.02         Chassis Board       27506-041.03         Chassis Board       27506-041.05         Chassis Board       27506-061.02         Chassis Board       27506-061.03         Chassis Board       27506-071.04         Chassis Board       27506-071.04         Chassis Board       27506-071.08         Chassis Board       27506-071.08         Chassis Board       27506-071.07         Chassis Board       27506-071.07<   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          | •        |    |     |    |      |    |     |
| Keyboard Control 2         27506-056.01         ■ <td< td=""><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>  |                      |              |        |   | •  |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Keyboard Control 2       27506-056.02       Image: Control 2 contr   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
| Video Head Amplifier         27506-048.02           Video Head Amplifier         27506-065.01           Video Head Amplifier         27506-072.02           Video Head Amplifier         27506-072.02           Video/Sound Head Amplifier         27506-072.02           Video/Sound Head Amplifier         27506-031.01           Chassis Board         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.05           Chassis Board         27506-041.07           Chassis Board         27506-061.02           Chassis Board         27506-061.03           Chassis Board         27506-071.04           Chassis Board         27506-071.04           Chassis Board         27506-071.04           Chassis Board         27506-071.04           Chassis Board         27506-071.08           Chassis Board         27506-071.08           Chassis Board         27506-071.06           Chassis Board         27506-071.07           Chassis Board         27506-071.07           Chassis Board         27506-071.06           Chassis Board         27506-071.07           Chassis Board         27506-071.01           Chassis Board         27506-071.01   |                      | 27506-056.01 |        |   |    |    |   |   |    |    |          |    |     |          |          |    | •   |    |      |    |     |
| Video Head Amplifier         27506-065.01         ■         <  |                      |              |        |   |    |    |   |   |    |    |          |    | •   |          | •        |    |     |    |      |    |     |
| Video Head Amplifier         27506-072.01         ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          | •  | •   | •  | •    |    |     |
| Video Head Amplifier         27506-072.02         Image: Control of the control of t   |                      |              |        |   |    |    |   |   |    |    |          |    |     | •        | •        |    |     |    |      |    |     |
| Video/Sound Head Amplifier         27505-079.01         ●  |                      |              | •      | • | •  |    | • |   | •  |    |          |    |     |          |          |    |     |    |      |    |     |
| Field Store         27506-031.01           Chassis Board         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.05           Chassis Board         27506-041.07           Chassis Board         27506-061.02           Chassis Board         27506-061.03           Chassis Board         27506-071.01           Chassis Board         27506-071.04           Chassis Board         27506-071.05           Chassis Board         27506-071.08           Chassis Board         27506-071.08           Chassis Board         27506-071.06           Chassis Board         27506-071.07           Chassis Board         27506-071.07           Chassis Board         27506-071.07           Chassis Board         27506-022.01           Chassis Board         27506-071.07           Chassis Board         27506-020.01           Chassis Board   | Video Head Amplifier |              |        |   |    |    |   | • |    | •  | •        | •  | •   |          |          |    |     |    |      |    |     |
| Chassis Board         27506-041.02           Chassis Board         27506-041.03           Chassis Board         27506-041.05           Chassis Board         27506-041.07           Chassis Board         27506-061.02           Chassis Board         27506-061.03           Chassis Board         27506-071.01           Chassis Board         27506-071.04           Chassis Board         27506-071.05           Chassis Board         27506-071.05           Chassis Board         27506-071.08           Chassis Board         27506-071.06           Chassis Board         27506-071.07           Chassis Board         27506-071.07           Chassis Board         27506-071.07           Chassis Board         27506-022.01           Chassis Board         27506-020.01           Chassis Board         27506-020.01           Chassis Board         27506-020.01           Chroma         27506-020.01           DOS         27506-010.01           Power Supply         27506-049.02           Power Supply         27506-049.03           Power Supply         27506-076.01           Sound Module         27506-025.01           Video 1         27506-026.01   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
| Chassis Board       27506-041.03         Chassis Board       27506-041.07         Chassis Board       27506-061.02         Chassis Board       27506-061.03         Chassis Board       27506-071.01         Chassis Board       27506-071.04         Chassis Board       27506-071.04         Chassis Board       27506-071.05         Chassis Board       27506-071.05         Chassis Board       27506-071.06         Chassis Board 1       27506-071.06         Chassis Board 2       27506-071.07         Chassis Board 3       27506-022.01         Chassis Board 4       27506-022.01         Chassis Board 5       27506-022.01         Chassis Board 6       27506-022.01         Chassis Board 7       27506-022.01         Chassis Board 9       27506-024.01         Chassis Board 9       27506-024.01         Chassis Board 9       27506-024.01         Chassis Board 9       27506-049.02         Power Supply       27506-049.02         Power Supply       27506-049.03         Power Supply       27506-049.04         Power Supply       27506-023.01         Tuner-Modulator       29502-027.02         Video 1  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
| Chassis Board         27506-041.07           Chassis Board         27506-041.07           Chassis Board         27506-061.02           Chassis Board         27506-061.03           Chassis Board         27506-071.01           Chassis Board         27506-071.04           Chassis Board         27506-071.05           Chassis Board         27506-071.05           Chassis Board         27506-071.08           Chassis Board 1         27506-021.01           Chassis Board 2         27506-071.06           Chassis Board 3         27506-022.01           Chassis Board 4         27506-022.01           Chassis Board 5         27506-022.01           Chassis Board 6         27506-022.01           Chassis Board 7         27506-022.01           Chroma         27506-022.01           DOS         27506-024.01           DOS         27506-049.02           Power Supply         27506-049.03           Power Supply         27506-049.04           Power Supply         27506-023.01           Tuner-Modulator         29502-027.02           Video 1         27506-025.01           Video 2         27506-027.01           Video 3         27506-027.01     <  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    | •    |    |     |
| Chassis Board       27506-041.07         Chassis Board       27506-061.02         Chassis Board       27506-061.03         Chassis Board       27506-071.01         Chassis Board       27506-071.04         Chassis Board       27506-071.05         Chassis Board       27506-071.08         Chassis Board 1       27506-021.01         Chassis Board 1       27506-071.06         Chassis Board 1       27506-071.07         Chassis Board 2       27506-022.01         Chroma       27506-022.01         DOS       27506-049.02         Power Supply       27506-049.02         Power Supply       27506-049.03         Power Supply       27506-076.01         Sound Module       27506-023.01         Tuner-Modulator       29502-027.02         Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          | •  | _   |    |      |    |     |
| Chassis Board         27506-061.02         ■ <td></td>   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board       27506-061.03       ■<  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     | •  |      |    |     |
| Chassis Board         27506-071.01         ● <td></td>   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board       27506-071.04       ■<  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          | •        |    |     |    |      |    |     |
| Chassis Board       27506-071.05       ■<  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board       27506-071.08       ●<  |                      |              |        |   |    |    |   | • |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board 1       27506-021.01       ●   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board 1       27506-071.06       ■   |                      |              |        |   |    | •  |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board 1       27506-071.07       ■   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Chassis Board 2       27506-022.01       ●   |                      |              |        |   |    |    |   |   |    |    | •        | •  |     |          |          |    |     |    |      |    |     |
| Chroma       27506-024.01       ■  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| DOS       27506-017.01       Image: Control of the control of   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Power Supply       27506-049.02         Power Supply       27506-049.04         Power Supply       27506-049.04         Power Supply       27506-076.01         Sound Module       27506-023.01         Tuner-Modulator       29502-027.02         Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Power Supply       27506-049.03         Power Supply       27506-049.04         Power Supply       27506-076.01         Sound Module       27506-023.01         Tuner-Modulator       29502-027.02         Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Power Supply       27506-049.04         Power Supply       27506-076.01         Sound Module       27506-023.01         Tuner-Modulator       29502-027.02         Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          | •        |    |     |    |      |    |     |
| Power Supply       27506-076.01       • • • • • • • • • • • • • • • • • • •  |                      |              |        |   |    |    |   |   |    |    |          |    |     | Ĭ        |          |    |     |    |      |    |     |
| Sound Module       27506-023.01         Tuner-Modulator       29502-027.02         Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    |     |
| Tuner-Modulator       29502-027.02       ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●   |                      |              |        | _ | _  |    |   | _ | _  |    | Ĭ        | Ĭ  | Ĭ   |          |          |    |     |    |      |    |     |
| Video 1       27506-025.01         Video 2       27506-026.01         Video 3       27506-027.01   |                      |              |        |   |    |    |   | • | •  |    |          |    |     |          |          |    |     |    | •    |    |     |
| Video 2       27506-026.01       ■         Video 3       27506-027.01       ■  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      |    | •   |
| Video 3 27506-027.01   |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  |     |
|  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |
|  |                      |              |        |   |    |    |   |   |    |    |          |    |     |          |          |    |     |    |      | •  | •   |

Video

3.2 Grundig Service

# Module Chart: GV 200 to GV 280 S (Export, Part 1)

|                            |                        |           |         |           | `          |         | •       |             | •           |            |           |            | ,        |           |            |         |             |                  |                |                  |
|----------------------------|------------------------|-----------|---------|-----------|------------|---------|---------|-------------|-------------|------------|-----------|------------|----------|-----------|------------|---------|-------------|------------------|----------------|------------------|
| Bezeichnung<br>Designation | Sachnummer<br>Part No. | GV 200 GB | MV 2005 | GV 201 GB | GV 201-1 * | MV 2105 | MV 2115 | GV 206 EURO | GV 216 EURO | GV 220 PDC | GV 240 GB | GV 240 NIC | GV 250 E | GV 250 GB | GV 250 NIC | MV 2505 | GV 255 EURO | GV 280S FT/NIC/E | GV 280S FT/NIC | GV 280S T/NIC/GB |
| Archive                    | 27505-108.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                | •              | •                |
| Archive                    | 27506-051.01           |           |         |           |            |         |         |             |             |            |           |            |          | •         | •          |         |             |                  |                |                  |
| Keyboard Control           | 27506-018.03           |           |         |           |            |         |         | •           | •           |            |           |            |          |           |            |         |             |                  |                |                  |
| Keyboard Control           | 27506-052.01           |           |         |           |            |         |         |             |             |            |           |            | •        | •         | •          | •       |             |                  |                |                  |
| Keyboard Control           | 27506-052.09           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         | •           |                  |                |                  |
| Keyboard Control           | 27506-053.01           |           |         |           |            |         |         |             |             |            | •         | •          |          |           |            |         |             |                  |                |                  |
| Keyboard Control           | 27506-073.01           | •         | •       | •         |            | •       |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Keyboard Control           | 27506-074.01           |           |         |           |            |         | •       |             |             | •          |           |            |          |           |            |         |             |                  |                |                  |
| Keyboard Control 1         | 27506-028.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                | •              | •                |
| Keyboard Control 2         | 27506-029.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                | •              | •                |
| Video Head Amplifier       | 27506-003.01           |           |         |           |            |         |         | •           |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Video Head Amplifier       | 27506-003.02           |           |         |           |            |         |         |             | •           |            |           |            |          |           |            |         |             |                  |                |                  |
| Video Head Amplifier       | 27506-048.02           |           |         |           |            |         |         |             |             |            | •         | •          | •        | •         | •          | •       | •           |                  |                |                  |
| Video Head Amplifier       | 27506-072.01           | •         |         | •         |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Video Head Amplifier       | 27506-072.02           |           |         |           |            | •       | •       |             |             | •          |           |            |          |           |            |         |             |                  |                |                  |
| Video/Sound Head Amp.      | 27505-079.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                |                | •                |
| Field Store                | 27506-031.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                | •              | •                |
| Chassis Board              | 27506-015.33           |           |         |           |            |         |         | •           | •           |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-041.06           |           |         |           |            |         |         |             |             |            |           | •          |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-041.07           |           |         |           |            |         |         |             |             |            |           |            |          |           |            | •       |             |                  |                |                  |
| Chassis Board              | 27506-041.08           |           |         |           |            |         |         |             |             |            |           |            |          |           | •          |         |             |                  |                |                  |
| Chassis Board              | 27506-041.10           |           |         |           |            |         |         |             |             |            |           |            | •        |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-041.63           |           |         |           |            |         |         |             |             |            | •         |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-041.64           |           |         |           |            |         |         |             |             |            |           |            |          | •         |            |         |             |                  |                |                  |
| Chassis Board              | 27506-071.02           |           | •       |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-071.04           |           |         |           |            | •       |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-071.05           |           |         |           |            |         | •       |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-071.63           | •         |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board              | 27506-071.64           |           |         | •         |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board 1            | 27506-021.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                | •                |
| Chassis Board 1            | 27506-041.34           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         | •           |                  |                |                  |
| Chassis Board 1            | 27506-071.06           |           |         |           |            |         |         |             |             | •          |           |            |          |           |            |         |             |                  |                |                  |
| Chassis Board 2            | 27506-022.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             | •                |                |                  |
| Chassis Board 2            | 27506-022.02           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  | •              | •                |
| Chassis Board 2            | 27506-043.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         | •           |                  |                |                  |
| Chroma                     | 27506-006.06           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Chroma                     | 27506-006.07           |           |         |           |            |         |         |             | •           |            |           |            |          |           |            |         |             |                  |                |                  |
| Chroma                     | 27506-024.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                | •                |
| CP-Pl. (Canal Plus)        | 27506-044.03           |           |         |           |            |         |         |             |             |            |           |            | •        |           |            |         | •           |                  |                |                  |
| DOS                        | 27506-017.01           |           |         | •         |            |         |         |             |             | •          |           |            |          |           |            |         |             |                  |                |                  |
| Erase Oscillator           | 27506-011.01           |           |         |           |            |         |         | •           | •           |            |           |            |          |           |            |         |             |                  |                |                  |
| Power Supply               | 27506-008.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Power Supply               | 27506-049.02           |           |         |           |            |         |         |             |             |            | •         | •          | _        |           |            |         |             |                  |                |                  |
| Power Supply               | 27506-049.04           |           |         |           |            |         |         |             |             |            |           |            |          |           | •          |         | •           |                  |                |                  |
| Power Supply               | 27506-076.01           | •         |         | •         |            | •       | •       |             |             | •          |           |            |          |           |            |         |             | •                |                |                  |
| Nicam-Decoder              | 27505-040.02           |           |         |           |            |         |         |             |             |            |           | _          |          |           |            |         |             |                  |                |                  |
| Nicam-Decoder              | 27506-050.01           |           |         |           |            |         |         |             |             |            | •         |            | •        | •         | •          |         |             | _                |                |                  |
| Nicam-IF-Amplifier         | 27505-080.02           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |
| Nicam-IF-Amplifier         | 27505-080.64           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                | -                |
| Sound                      | 27506-023.01           |           |         |           |            |         |         |             |             |            |           |            |          |           |            |         |             |                  |                |                  |

<sup>\*</sup> see page 3-11

Grundig Service 3.3

Video

# Module Chart GV 200 to GV 280 S (Export, Part 2)

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | GV 200 GB | / 2005 | GV 201 GB | GV 201-1 * | / 210 | MV 2115 | GV 206 EURO | V 216 | GV 220 PDC | GV 240 GB | GV 240 NIC | GV 250 E | GV 250 GB |   | MV 2505 | > | > | GV 280S FT/NIC | GV 280S T/NIC/GB |
|----------------------------|------------------------|-----------|--------|-----------|------------|-------|---------|-------------|-------|------------|-----------|------------|----------|-----------|---|---------|---|---|----------------|------------------|
| Tuner-Modulator            | 29502-027.02           |           |        |           |            | •     | •       |             |       | •          |           | •          | •        |           | • | •       |   | • | •              |                  |
| Tuner-Modulator            | 29502-027.06           | •         |        | •         |            |       |         |             |       |            | •         |            |          | •         |   |         |   |   |                | •                |
| Tuner-Modulator            | 29502-027.09           |           |        |           |            |       |         | •           | •     |            |           |            |          |           |   |         | • |   |                |                  |
| Video 1                    | 27506-025.01           |           |        |           |            |       |         |             |       |            |           |            |          |           |   |         |   | • | •              | •                |
| Video 2                    | 27506-026.01           |           |        |           |            |       |         |             |       |            |           |            |          |           |   |         |   | • | •              | •                |
| Video 3                    | 27506-027.01           |           |        |           |            |       |         |             |       |            |           |            |          |           |   |         |   | • | •              | •                |
| IF                         | 27506-007.02           |           |        |           |            |       |         | •           | •     |            |           |            |          |           |   |         |   |   |                |                  |

<sup>\*</sup> see page 3-11

Video

3.4 Grundig Service

### Module Chart GV 400 to GV 437 (Part 1)

| Keyboard Control   | Bezeichnung<br>Designation | Sachnummer<br>Part No. | GV 400 | GV 400 GB | GV 400 OST | GV 400 VPS | GV 401 VPT | GV 402 | GV 403 | GV 404 SV | GV 405 EURO | GV 406 EURO | GV 407 | GV 409 M | GV 410 | <b>GV 410 VPS</b> | GV 411 | GV 411 OST | GV 411-1 | GV 411-2 |    | GV 414 SV | GV 415 EURO | GV 416 EURO | GV 417 | GV 420 VPT | GV 430 | GV 430 GB | GV 430 VPS | GV 434 SV | <b>GV 435 EURO</b> | GV 437 |
|--|----------------------------|------------------------|--------|-----------|------------|------------|------------|--------|--------|-----------|-------------|-------------|--------|----------|--------|-------------------|--------|------------|----------|----------|----|-----------|-------------|-------------|--------|------------|--------|-----------|------------|-----------|--------------------|--------|
| Keyboard Control   | Keyboard Control           | 27599-002.00           | •      |           |            |            |            | •      |        |           |             |             |        |          | •      |                   |        |            |          |          | •  |           |             |             |        |            | •      |           |            |           |                    |        |
| Keyboard Control X7599-002.08 Keyboard Control X7599-002.19 Keyboard Control X7599-002.19 Keyboard Control X7599-002.11 Keyboard Control X7599-002.14 Keyboard Control X7599-002.15 Keyboard Control X7599-002.15 Keyboard Control X7599-002.16 Keyboard Control X7599-002.16 Keyboard Control X7599-002.16 Keyboard Control X7599-002.21 Keyboard Control X7599-001.01 Chassis Board X7599-001.02 Chassis Board X7599-001.04 Chassis Board X7599-001.05 Chassis Board X7599-001.10 Chassis Board X7599-00  |                            |                        |        |           |            |            |            |        |        |           | •           |             |        |          |        |                   |        |            |          |          |    |           | •           |             |        |            |        |           |            |           |                    |        |
| Keyboard Control   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        | •                 |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Keyboard Control Keybo  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   | •      |            |          |          |    |           |             |             |        |            |        |           | •          |           |                    |        |
| Keyboard Control   27599-002.01   Keyboard Control   27599-002.12   Keyboard Control   27599-002.14   Keyboard Control   27599-002.15   Keyboard Control   27599-002.15   Keyboard Control   27599-002.26   Keyboard Control   27599-002.31   Keyboard Control   27599-002.31   Keyboard Control   27599-002.54   Keyboard Control   27599-002.54   Keyboard Control   27599-002.55   Keyboard Control   27599-002.55   Keyboard Control   27599-002.55   Keyboard Control   27599-002.55   Keyboard Control   27599-001.01   Chassis Board   27599-001.02   Chassis Board   27599-001.02   Chassis Board   27599-001.03   Chassis Board   27599-001.04   Chassis Board   27599-001.05   Chassis Board   27599-001.06   Chassis Board   27599-001.07   Chassis Board   27599-001.07   Chassis Board   27599-001.01   Chassis Board   27599-001.02   27599-001.02   27599-001.03   27    |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Keyboard Control   |                            |                        |        |           |            |            |            |        |        |           |             | •           |        |          |        |                   |        |            |          |          |    |           |             | •           |        |            |        |           |            |           |                    |        |
| Keyboard Control   |                            |                        |        | •         |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        | •         |            |           | •                  |        |
| Keyboard Control 27599-002.15   Keyboard Control 27599-002.31   Keyboard Control 27599-002.55   Chassis Board 27599-001.00   Chassis Board 27599-001.01   Chassis Board 27599-001.02   Chassis Board 27599-001.02   Chassis Board 27599-001.03   Chassis Board 27599-001.04   Chassis Board 27599-001.05   Chassis Board 27599-001.06   Chassis Board 27599-001.07   Chassis Board 27599-001.17   Chassis Board 27599-001.18   Discussion Chassis B | Keyboard Control           | 27599-002.13           |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    | •         |             |             |        |            |        |           |            |           |                    |        |
| Keyboard Control   27599-002.26   Keyboard Control   27599-002.51   Keyboard Control   27599-002.54   Keyboard Control   27599-002.55  | Keyboard Control           |                        |        |           | •          |            |            |        | •      |           |             |             |        |          |        |                   |        | •          |          |          |    |           |             |             |        |            |        | Ш         |            |           |                    |        |
| Keyboard Control   27599-002.54   Keyboard Control   27599-002.54   Keyboard Control   27599-001.01   1)   1)   1)   1)   1)   1)   1)   |                            |                        |        |           |            |            |            |        |        | •         |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Keyboard Control   27599-002.54   Keyboard Control   27599-001.01   1)   1)   1)   1)   1)   1)   1)   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Keyboard Control   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            | •        |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board  |                            | 27599-001.00           | 1)     |           |            |            |            | 1)     |        |           |             |             |        |          | 1)     |                   |        |            |          |          | 1) |           |             |             |        |            |        |           |            | П         | П                  |        |
| Chassis Board 27599-001.03 Chassis Board 27599-001.05 Chassis Board 27599-001.05 Chassis Board 27599-001.07 Chassis Board 27599-001.07 Chassis Board 27599-001.09 Chassis Board 27599-001.10 Chassis Board 27599-001.11 Chassis Board 27599-001.13 Chassis Board 27599-001.13 Chassis Board 27599-001.14 Chassis Board 27599-001.14 Chassis Board 27599-001.26 Chassis Board 27599-001.28 Chassis Board 27599-001.28 Chassis Board 27599-001.89 Chassis Board 27599-001.90 Chassis Board 27599-001.90 Chassis Board 27599-001.90 Chassis Board 27599-004.09 Head Amplifier 27599-004.01 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 27599-004.03 Head Amplifier 27599-004.04 | Chassis Board              | 27599-001.01           |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            | 1)     |           |            |           |                    |        |
| Chassis Board  |                            |                        |        |           |            | •          |            |        |        | •         |             |             |        |          |        | •                 |        |            |          |          |    | •         |             |             |        |            |        |           |            | Ш         |                    |        |
| Chassis Board 27599-001.05 Chassis Board 27599-001.07 Chassis Board 27599-001.07 Chassis Board 27599-001.09 Chassis Board 27599-001.10 Chassis Board 27599-001.11 Chassis Board 27599-001.14 Chassis Board 27599-001.14 Chassis Board 27599-001.14 Chassis Board 27599-001.15 Chassis Board 27599-001.15 Chassis Board 27599-001.26 Chassis Board 27599-001.27 Chassis Board 27599-001.28 Chassis Board 27599-001.28 Chassis Board 27599-001.37 Chassis Board 27599-001.37 Chassis Board 27599-001.37 Chassis Board 27599-001.90 Chassis Board 27599-  |                            |                        |        |           |            |            |            |        |        |           | •           | •           |        |          |        |                   |        |            |          |          |    |           | •           | •           |        |            |        |           |            |           |                    |        |
| Chassis Board  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   | •      |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           | •                  |        |
| Chassis Board  |                            |                        |        |           |            |            | •          |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        | •          |        |           |            |           |                    |        |
| Chassis Board 27599-001.14 (Chassis Board 27599-001.14 (Chassis Board 27599-001.14 (Chassis Board 27599-001.14 (Chassis Board 27599-001.26 (Chassis Board 27599-001.28 (Chassis Board 27599-001.28 (Chassis Board 27599-001.37 (Chassis Board 27599-001.37 (Chassis Board 27599-001.37 (Chassis Board 27599-001.38 (Chassis Board 27599-001.89 (Chassis Board 27599-001.90 (Chassis Board 27599-004.00 (Ch |                            |                        |        | •         |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board 27599-001.13 2)  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        | •         |            |           | •                  |        |
| Chassis Board 27599-001.19 1) 2  |                            |                        | 0)     |           | 1)         |            |            | ٥)     |        |           |             |             |        |          | ٥١     |                   |        | 1)         |          |          | ٥) |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board 27599-001.26 27599-001.28 2) Chassis Board 27599-001.37 27599-001.37 27599-001.37 27599-001.37 27599-001.37 27598-001.37 27599-001.39 27599-001.39 27599-001.99 27599-004.00 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |                            |                        | 2)     |           |            |            |            | 2)     |        |           |             |             |        |          | 2)     |                   |        |            |          |          | 2) |           |             |             |        |            | 2)     |           |            |           |                    |        |
| Chassis Board 27599-001.26 2) Chassis Board 27599-001.37 Chassis Board 27599-001.37 Chassis Board 27599-001.37 Chassis Board 27599-001.89 Chassis Board 27599-001.90 Chassis Board 27599-001.90 Chassis Board 27599-001.90 Chassis Board 27599-004.00 Chassis Board 27599-004.00 Head Amplifier 27599-004.01 Head Amplifier 27599-004.01 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 37599-004.19 Head Amplifier 37599-003.10 Hodulator 37598-005.31 Modulator 37598-005.31 Modulator 37598-006.03 MVIO 37598-006.03 MVIO 37598-006.05 MVIO 37598-003.00 Power Supply 37599-003.02 Power Supply 37599-003.00 Power Supply 37599-003.10 Power Supply 37599-003.10 Power Supply 37599-003.26 RICAM-Decoder 37598-006.03 NICAM-Decoder 37598-003.26  |                            |                        |        | 1)        |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            | -,     |           |            |           |                    |        |
| Chassis Board 27599-001.37 Chassis Board 27599-001.89 Chassis Board 27599-001.89 Chassis Board 27599-001.90 Chassis Board 27598-005.24 Front Panel 75981-310.00 Head Amplifier 27599-004.01 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 27599-004.03 Head Amplifier 75981-310.17 Loading Unit 75981-310.17 Loading Unit 75981-309.82 Tape Deck Sensor 75988-01.18 Tape Deck Sensor 75988-01.18 Tape Deck Sensor 75988-01.10 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.32 MSIO/VPS 7598-003.00 Power Supply 27599-003.00 Power Supply 75981-307.56 NICAM-Decoder 75988-03.26   | Chassis Board              |                        |        |           | 2)         |            |            |        |        |           |             |             |        |          |        |                   |        | 2)         |          |          |    |           |             |             |        |            |        |           |            | П         | П                  |        |
| Chassis Board 27599-001.37 Chassis Board 27599-001.89 Chassis Board 2 7598-033.23 CSP 7598-033.23 CSP 75988-05.24 Front Panel 75981-310.00 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 27599-004.03 Head Amplifier 27599-004.03 Head Amplifier 27599-004.03 Head Amplifier 27599-004.03 Head Amplifier 27599-004.04 Head Amplifier 27599-004.05 Head Amplifier 27598-004.05 Head Amplifier 27599-004.05 Head Amplifier 27599-004.05 Head Amplifier 37598-004.05 Head Amplifier 27599-004.05 Head Amplifier 37598-004.05 Head Amplifier 37598-005.05 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-005.31 Modulator 75988-006.00 Modulator 75988-006.03 Modulator 75988-006.03 Modulator 75988-006.03 Modulator 75988-006.03 MVIO 75988-006.65 Power Supply 27599-003.02 Power Supply 27599-003.05 Power Supply 27599-003.05 Power Supply 75981-307.56 NICAM-Decoder 7598-03.26  |                            |                        |        | 2)        |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board  |                            |                        |        |           |            |            |            |        |        |           |             |             | •      |          |        |                   |        |            |          |          |    |           |             |             | •      |            |        |           |            |           |                    |        |
| Chassis Board 27599-001.90 Chassis Board 2 75988-033.23 CSP 75988-033.23 Front Panel 75981-310.00 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 27599-004.03 Head Amplifier 27599-004.19 Head Amplifier 27598-004.19 Head Amplifier 375981-310.17 Loading Unit 75981-309.82 Tape Deck Sensor 75988-011.8 Tape Deck Sensor 75988-011.8 Tape Deck Sensor 75988-01.8 Tape Deck Sensor 75988-03.11 Modulator 75988-03.21 Modulator 75988-03.21 Modulator 75988-03.21 Modulator 75988-03.31 Modulator 75988-06.65 Power Supply 27599-03.00 Power Supply 27599-03.00 Power Supply 27599-03.10 Power Supply 27599-03.10 Power Supply 27599-03.02 Power Supply 27599-03.06 Power Supply 27599-03.06 Power Supply 27599-03.06 Power Supply 75981-307.56 NICAM-Decoder 75988-03.32  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Chassis Board 2 CSP 75988-005.24 Front Panel 75981-310.00 Head Amplifier 27599-004.01 Head Amplifier 27599-004.02 Head Amplifier 27599-004.03 Head Amplifier 27599-004.03 Head Amplifier 27599-004.03 Head Amplifier 75981-310.17 Loading Unit 75981-300.18 Tape Deck Sensor 75988-001.18 Tape Deck Sensor 75988-001.18 Tape Deck Sensor Modulator 75988-002.7 Modulator 75988-003.71 Modulator 75988-005.31 Modulator 75988-006.00 Modulator 75988-006.03 MSIO/PS 75988-006.03 MVIO 75988-006.65 Power Supply 27599-003.00 Power Supply 27599-003.05 Power Supply 27599-003.05 Power Supply 27599-003.05 Power Supply 27599-003.05 Power Supply 27599-003.06 NICAM-Decoder 75988-033.26   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            |           |                    |        |
| Front Panel 75981-310.00   | Chassis Board 2            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            | П         |                    |        |
| Head Amplifier   |                            | 75988-005.24           |        |           |            |            |            |        |        |           | •           | •           |        |          |        |                   |        |            |          |          |    |           | •           | •           |        |            |        |           |            |           | •                  |        |
| Head Amplifier   |                            |                        |        |           |            |            |            |        |        |           |             |             |        | •        |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Head Amplifier 27599-004.02  |                            |                        | •      | •         | •          | •          | •          | •      | •      | •         | •           | •           | •      |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Head Amplifier   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          | •      | •                 | •      | •          |          |          | •  | •         | •           | •           | •      | •          |        |           |            |           | •                  |        |
| Head Amplifier   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            | •        |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Head Amplifier   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            |           |                    |        |
| Tape Deck Sensor 75988-001.18 75988-018:22 Modulator 27512-103.01 Modulator 75988-00.27 Modulator 75988-003.71 Modulator 75988-003.71 Modulator 75988-005.31 Modulator 75988-06.00 Modulator 75988-06.00 Modulator 75988-005.32 MSIO 75988-006.65 MVIO 75988-006.65 MVIO 75988-003.02 Power Supply 27599-003.00 Power Supply 27599-003.05 Power Supply 27599-003.10 Power Supply 27599-003.10 Power Supply 27599-003.10 Power Supply 27599-003.20 NICAM-Decoder 75988-03.26 MICAM-Decoder 75988-03.26  |                            | 75981-310.17           |        |           |            |            |            |        |        |           |             |             |        | •        |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Tape Deck Sensor 75988-018:22  |                            |                        |        |           |            |            |            |        |        |           |             |             |        | •        |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Modulator       27512-103.01       ■   |                            |                        | •      | •         | •          | •          | •          | •      | •      | •         | •           | •           | •      |          | •      | •                 | •      | •          | •        |          | •  | •         | •           | •           | •      | •          | •      | •         | •          | •         | •                  | •      |
| Modulator       75988-000.27       ◆   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Modulator       75988-003.71       ●   |                            |                        | •      |           |            |            |            | •      |        |           |             |             |        |          | •      |                   |        |            |          |          | •  |           |             |             |        |            | •      |           |            |           |                    |        |
| Modulator       75988-006.00         Modulator       75988-028.97         MSIO       75988-005.32         MSIO/VPS       75988-006.03         MVIO       75989-003.00         Power Supply       27599-003.00         Power Supply       27599-003.05         Power Supply       27599-003.10         Power Supply       27599-003.10         Power Supply       27599-006.03         NICAM-Decoder       7598-033.26  |                            |                        |        |           | •          |            |            |        |        |           |             |             |        |          |        |                   |        | •          |          |          |    |           |             |             |        |            |        |           |            | П         | П                  |        |
| Modulator       75988-028.97         MSIO       75988-005.32         MSIO/VPS       75988-006.03         MVIO       75988-006.65         Power Supply       27599-003.00         Power Supply       27599-003.02         Power Supply       27599-003.05         Power Supply       27599-003.10         Power Supply       27599-003.10         Power Supply       75981-307.56         NICAM-Decoder       75988-033.26  |                            |                        |        |           |            |            |            |        |        |           | •           | •           |        |          |        |                   |        |            |          |          |    |           | •           | •           |        |            |        |           |            |           | •                  |        |
| MSIO 75988-005.32  |                            |                        |        |           |            | •          | •          |        |        | •         |             |             |        |          |        | •                 |        |            |          |          |    | •         |             |             |        | •          |        |           | •          | •         |                    |        |
| MSIO/VPS 75988-006.03  |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| MVIO       75988-006.65         Power Supply       27599-003.00         Power Supply       27599-003.02         Power Supply       27599-003.05         Power Supply       27599-003.10         Power Supply       27599-003.10         Power Supply       75981-307.56         NICAM-Decoder       27599-006.03         NICAM-Decoder       75988-033.26  |                            |                        |        |           |            | •          |            |        |        | •         | •           | _           |        |          |        | •                 | •      |            |          |          |    | •         | •           | •           |        |            |        |           | •          |           |                    |        |
| Power Supply 27599-003.02  |                            |                        |        |           |            |            | •          |        |        |           |             |             |        |          |        |                   |        |            |          |          |    |           |             |             |        | •          |        |           |            |           |                    |        |
| Power Supply 27599-003.05 Power Supply 27599-003.10 Power Supply 75981-307.56 NICAM-Decoder 27599-006.03 NICAM-Decoder 75988-033.26  |                            |                        | •      | •         | •          | •          |            | •      |        | •         |             | •           |        |          | •      |                   |        | •          |          |          | •  |           |             | •           |        |            | •      | •         |            |           |                    |        |
| Power Supply 27599-003.10 Power Supply 75981-307.56 NICAM-Decoder 27599-006.03 NICAM-Decoder 75988-033.26  |                            |                        |        |           |            |            | •          |        |        |           | •           |             |        |          |        | •                 | •      |            |          |          |    | •         | •           |             |        | •          |        |           | •          | •         | •                  |        |
| Power Supply 75981-307.56 NICAM-Decoder 27599-006.03 NICAM-Decoder 75988-033.26  |                            |                        |        |           |            |            |            |        | •      |           |             |             | •      |          |        |                   |        |            |          |          |    |           |             |             | •      |            |        |           |            |           |                    | •      |
| NICAM-Decoder 27599-006.03<br>NICAM-Decoder 75988-033.26   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            |           |                    |        |
| NICAM-Decoder 75988-033.26   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            | •        |          |    |           |             |             |        |            |        |           |            |           |                    |        |
| Tuner 27512-201.01   • •   • •   • •   • • •   • • • •   |                            |                        |        |           |            |            |            |        |        |           |             |             |        |          |        |                   |        |            |          | •        |    |           |             |             |        |            |        |           |            |           |                    |        |
|  |                            |                        |        |           |            | •          | •          |        |        | •         | •           | •           |        |          |        | •                 | •      |            | •        |          |    | •         | •           | •           |        | •          |        |           | •          | •         | •                  |        |
| Tuner 75988-000.30   |                            |                        | •      |           | •          |            |            | •      |        |           |             |             |        |          | •      |                   |        | •          |          |          | •  |           |             |             |        |            | •      |           |            |           |                    |        |

<sup>1)</sup> Chassis boards up to production code "WD 29"

Video

<sup>2)</sup> Chassis boards from production code "WD 30"

### Module Chart GV 400 to GV 437 (Part 2)

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | GV 400 | L | _ |   | GV 401 VPT | _ | _ | GV 404 SV | 405 EUR | GV 406 EURO | 407 | GV 409 M | GV 410 | <b>GV 410 VPS</b> | 411 | <b>GV 411 OST</b> | 411 | GV 411-2 | GV 412 | GV 414 SV | 415 | GV 416 EURO | GV 417 | <b>GV 420 VPT</b> | GV 430 | GV 430 GB | GV 430 VPS | V 434 | GV 435 EURO | >            |
|----------------------------|------------------------|--------|---|---|---|------------|---|---|-----------|---------|-------------|-----|----------|--------|-------------------|-----|-------------------|-----|----------|--------|-----------|-----|-------------|--------|-------------------|--------|-----------|------------|-------|-------------|--------------|
| RP 10                      | 75988-000.10           | •      |   |   |   |            |   |   |           |         |             |     |          | •      |                   |     |                   |     |          |        |           |     |             |        |                   |        |           |            |       |             |              |
| RP 13                      | 75988-000.11           |        | • |   |   |            | • |   |           |         |             |     |          |        |                   |     |                   |     |          | •      |           |     |             |        |                   | •      | •         | •          | •     |             |              |
| RP 100                     | 75988-000.14           |        |   |   |   |            |   | • |           |         |             | •   |          |        |                   |     |                   |     |          |        |           |     |             | •      |                   |        |           |            |       |             | lacktriangle |
| RP 30                      | 27520-160.01           |        |   |   | • |            |   |   | •         | •       |             |     |          |        | •                 | •   |                   |     |          |        | •         | •   |             |        |                   |        |           |            |       |             |              |
| RP 33                      | 27520-171.01           |        |   |   |   |            |   |   |           |         | •           |     |          |        |                   |     |                   |     |          |        |           |     | •           |        |                   |        |           | •          | •     | •           |              |
| RP 35                      | 27520-161.01           |        |   |   |   | •          |   |   |           |         |             |     |          |        |                   |     |                   |     |          |        |           |     |             |        | •                 |        |           |            |       |             |              |
| RT 130                     | 75988-000.14           |        |   | • |   |            |   |   |           |         |             |     |          |        |                   |     |                   |     |          |        |           |     |             |        |                   |        |           |            |       |             |              |
| RT 151                     | 75988-033.22           |        |   |   |   |            |   |   |           |         |             |     |          |        |                   |     |                   |     | •        |        |           |     |             |        |                   |        |           |            |       |             |              |
| RT 230                     | 75988-000.15           |        |   |   |   |            |   |   |           |         |             |     |          |        |                   |     | •                 |     |          |        |           |     |             |        |                   |        |           |            |       |             |              |
| RP 409                     | 75981-397.28           |        |   |   |   |            |   |   |           |         |             |     | •        |        |                   |     |                   |     |          |        |           |     |             |        |                   |        |           |            |       |             |              |
| RT 750/131                 | 75988-035.07           |        |   |   |   |            |   |   |           |         |             |     |          |        |                   |     |                   | •   |          |        |           |     |             |        |                   |        |           |            |       |             |              |

Video

3.6 Grundig Service

Video

### Module Chart GV 4000 to GV 4200

| Bezeichnung<br>Designation | Sachnummer<br>Part No. | GV 4000 VPS | GV 4001 | GV 4002 VPS | GV 4003 VPS | GV 4010 SV-VPT | GV 4092 SV | GV 4092 VPS | GV 4192 SV | GV 4200 SV-VPT |     | MV 4005 | MV 4105      | ! | SE 4100 VPS  | SE 4104 SV | SE 4120 SV |   |
|----------------------------|------------------------|-------------|---------|-------------|-------------|----------------|------------|-------------|------------|----------------|-----|---------|--------------|---|--------------|------------|------------|---|
| Keyboard Control           | 27599-002.00           | •           | •       | •           | •           |                |            |             |            |                | Ī   | •       | •            |   |              |            |            |   |
| Keyboard Control           | 27599-002.06           |             |         |             |             |                |            | •           |            |                | ı   |         |              |   |              |            |            |   |
| Keyboard Control           | 27599-002.07           |             |         |             |             |                | •          |             |            |                |     |         |              |   |              |            |            |   |
| Keyboard Control           | 27599-002.08           |             |         |             |             | •              |            |             |            | •              |     |         |              |   |              |            |            |   |
| Keyboard Control           | 27599-002.11           |             |         |             |             |                |            |             |            |                |     |         |              |   | •            |            |            |   |
| Keyboard Control           | 27599-002.14           |             |         | •           |             |                |            |             |            |                |     |         |              |   |              |            |            |   |
| Keyboard Control           | 27599-002.16           |             |         |             |             |                |            |             |            |                |     |         |              |   |              |            | •          |   |
| Keyboard Control           | 27599-002.17           |             |         |             |             |                |            |             | •          |                |     |         |              |   |              |            |            |   |
| Keyboard Control           | 27599-002.18           |             |         |             |             |                |            |             |            |                |     |         |              |   |              | •          |            |   |
| Keyboard Control           | 27599-002.29           |             |         |             | •           |                |            |             |            |                |     |         |              |   |              |            |            |   |
| Chassis Board              | 27599-001.00           |             |         |             |             |                |            |             |            |                |     | 1)      | 1)           |   |              |            |            |   |
| Chassis Board              | 27599-001.02           |             |         |             |             |                | •          | •           |            |                |     |         |              |   | •            | •          |            |   |
| Chassis Board              | 27599-001.07           |             |         |             |             | •              |            |             |            | lacktriangle   |     |         |              |   |              |            |            |   |
| Chassis Board              | 27599-001.12           |             |         |             |             |                |            |             | •          |                |     |         |              |   |              |            |            |   |
| Chassis Board              | 27599-001.13           |             | •       |             |             |                |            |             |            |                |     | 2)      | 2)           |   |              |            |            |   |
| Chassis Board              | 27599-001.27           | •           |         | •           | •           |                |            |             |            |                |     |         |              |   |              |            |            |   |
| Chassis Board              | 27599-001.34           |             |         |             | •           |                |            |             |            |                |     |         |              |   |              |            |            |   |
| Head Amplifier             | 27599-004.00           | •           | •       | •           | •           | •              | •          | •           |            |                |     | •       |              |   | •            | •          |            |   |
| Head Amplifier             | 27599-004.01           |             |         |             |             |                |            |             | •          | •              | L   |         | •            |   |              |            | •          |   |
| Tape Deck Sensor           | 75988-001.18           | •           | •       | •           |             |                | •          | •           | •          |                |     |         |              |   | •            | •          | •          |   |
| Tape Deck Sensor           | 75988-001.22           |             |         |             | •           |                |            |             |            |                | L   |         |              |   |              |            |            |   |
| Modulator                  | 75988-000.27           |             |         |             |             |                |            |             |            |                |     |         |              |   |              |            |            |   |
| Modulator                  | 75988-006.00           |             |         |             |             |                | •          | •           | •          |                | L   |         |              |   | •            | •          | •          |   |
| MSIO/VPS                   | 75988-006.03           |             |         |             |             |                | •          | •           | •          |                |     |         |              |   | •            |            |            |   |
| Power Supply               | 27599-003.00           | •           |         |             | •           |                | •          | •           | •          |                | L   | •       | •            |   |              |            |            |   |
| Power Supply               | 27599-003.02           |             |         |             |             |                |            |             |            |                |     |         |              |   | •            |            |            |   |
| Power Supply               | 27599-003.05           |             | •       | •           | •           |                |            |             |            |                | L   |         |              |   |              |            |            |   |
| Power Supply               | 27599-003.07           |             |         |             |             | •              |            |             |            |                |     |         |              |   |              |            |            |   |
| Tuner                      | 27512-201.01           |             |         |             |             |                | •          | •           | •          | •              | L   |         |              |   | •            | •          | •          |   |
| Tuner                      | 75988-000.30           |             |         |             |             |                |            |             |            |                |     | •       |              |   |              |            |            |   |
|                            |                        |             |         | _           | _           | _              | _          | _           | _          |                |     |         |              |   |              |            | ı          | Į |
| RP 30                      | 27520-160.01           |             |         |             |             |                | •          | •           | •          |                |     |         |              |   | lacktriangle | •          | •          |   |
| RP 35                      | 27520-161.01           |             |         |             |             | •              |            |             |            | •              |     |         |              |   |              |            |            |   |
| RP 10                      | 75988-000.10           | •           |         | •           |             |                |            |             |            |                |     |         |              |   |              |            |            |   |
| RP 10 Minerva              | 75988-000.12           |             |         |             |             |                |            |             |            |                |     | •       |              |   |              |            |            |   |
| RP 13 Minerva              | 75988-000.13           |             |         |             |             |                |            |             |            |                |     |         | lacktriangle |   |              |            |            |   |
| DD 400                     | 75000 000 44           |             |         |             |             |                |            |             |            |                | - 1 |         |              |   |              |            |            |   |

1) Chassis board up to production code "WD 29"

75988-000.14

RP 100

2) Chassis boards from production code "WD 30"

### Module Chart GV 440 to GV 470

|                                       | I                               | ĺ       | ĺ   | I      | Ī   | Ī   | I                 | ĺ   | I                 | l 1  |             | i I        |             |             | l 1             |                  |                     | l I   | 1 1 | ı I                | i l            |
|---------------------------------------|---------------------------------|---------|-----|--------|-----|-----|-------------------|-----|-------------------|------|-------------|------------|-------------|-------------|-----------------|------------------|---------------------|-------|-----|--------------------|----------------|
|                                       |                                 |         |     |        |     |     |                   |     |                   |      |             |            |             | (           |                 |                  |                     | L     |     |                    | /PT            |
| Bezeichnung                           | Sachnummer                      | တ္သ     | ပ   |        | ř   | m   | ပ                 | RT  | ř                 | S    | Ξ           | C          | RT          | JRC         |                 |                  | S                   | S VPT |     | 'nΤ                | <u>-</u>       |
| Designation                           | Part No.                        | Y       | NIC |        | Ϋ́  | GE  | ž                 | ō   | Ϋ́                | ž    | Ξ           | Ž          | О           | J           | Σ               | ЪС               | S                   | S     |     | 2 \                | 2              |
|                                       |                                 | 440 VPS | 440 | 450    | 450 | 450 | 450               | 450 | 460               | 460  | 464         | 464        | 464         | 465         | 469             | 470              | 470                 | 470   |     | 459                | 459            |
|                                       |                                 | GV,     | 37. | GV 450 | 3,7 | 3,  | <b>GV 450 NIC</b> | 37. | <b>GV 460 VPT</b> | 3V 4 | GV 464 HIFI | GV 464 NIC | GV 464 OIRT | GV 465 EURO | <b>GV 469 M</b> | <b>GV 470 PC</b> | <b>GV 470 S NIC</b> | GΛ    |     | <b>GV 4592 VPT</b> | GV 4592 SV-VPT |
| AV-socket Board PC06                  | no spare part                   | 0       | O   | U      | O   | U   | O                 | 0   | O                 | U    | U           | U          | U           | O           | •               | U                | O                   | U     |     | U                  | U              |
| Archive                               | 27599-008.50                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 | •                | •                   | •     |     |                    |                |
| Display Control PC01                  | no spare part                   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| Display Control PC02                  | no spare part                   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| Keyboard Control 1                    | 27507-007.30<br>27507-007.31    |         |     | •      | •   | •   | •                 | •   | •                 | •    |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| Keyboard Control 1 Keyboard Control 1 | 27507-007.31                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    | •              |
| Keyboard Control 1                    | 27599-002.24                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 | •                | •                   | •     |     |                    |                |
| Keyboard Control 1                    | 27599-002.27                    |         |     |        |     |     |                   |     |                   |      | •           | •          | •           |             |                 |                  |                     |       | l   |                    |                |
| Keyboard Control 2                    | 27507-009.30                    |         |     |        |     |     |                   |     | •                 | •    |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| Keyboard Control 2                    | 27507-009.31                    | •       | •   | •      | •   | •   | •                 | •   |                   |      |             |            |             |             |                 |                  |                     |       |     | •                  | •              |
| Keyboard Control 2                    | 27599-002.25                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     | •     |     |                    |                |
| Keyboard Control 2                    | 27599-002.28<br>no spare part * |         |     |        |     |     |                   |     |                   |      | •           | •          | •           |             |                 |                  |                     |       |     |                    |                |
| Keyboard Control 3<br>Chassis Board   | 27507-001.30                    |         |     |        |     |     |                   |     | •                 |      |             |            | •           |             |                 | •                | •                   |       |     |                    |                |
| Chassis Board                         | 27507-001.30                    |         |     |        |     |     |                   |     | _                 | •    |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27507-001.33                    |         |     |        |     |     |                   |     |                   | _    |             | •          |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27507-001.34                    |         |     |        |     |     |                   |     |                   |      |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27507-001.35                    |         |     |        | •   |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       | l   |                    |                |
| Chassis Board                         | 27507-001.36                    |         |     |        |     | •   |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27507-001.37                    |         |     |        |     |     | •                 |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board<br>Chassis Board        | 27507-001.38<br>27507-001.39    |         |     | •      |     |     |                   | •   |                   |      |             |            |             |             |                 |                  |                     |       |     |                    | •              |
| Chassis Board                         | 27507-001.39                    | •       |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27507-001.41                    |         | •   |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27599-001.25                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 | •                |                     | •     |     |                    |                |
| Chassis Board                         | 27599-001.30                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  | •                   |       |     |                    |                |
| Chassis Board                         | 27599-001.32                    |         |     |        |     |     |                   |     |                   |      | •           |            | •           |             |                 |                  |                     |       |     |                    |                |
| Chassis Board                         | 27599-001.33                    |         |     |        |     |     |                   |     |                   |      |             | •          |             |             |                 |                  |                     |       |     |                    |                |
| Chassis Board PM01<br>HiFi-Audio PF01 | no spare part<br>no spare part  |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| HiFi-Sound PF02                       | no spare part                   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| HiFi-Audio, SIF PM03                  | no spare part                   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       | l   |                    |                |
| Head Amplifier                        | 27599-004.03                    | •       | •   | •      | •   | •   | •                 | •   | •                 | •    |             |            |             | •           |                 |                  |                     |       |     | •                  | •              |
| Head Amplifier                        | 27599-004.04                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 | •                | •                   | •     | l   |                    |                |
| Head Amplifier                        | 27599-004.05                    |         |     |        |     |     |                   |     |                   |      | •           | •          | •           |             |                 | •                | •                   | •     |     |                    |                |
| Head Amplifier PH02                   | 75981-318.32                    |         | •   |        | _   | _   |                   |     | _                 | _    |             |            |             | _           | •               |                  |                     |       |     | _                  |                |
| Tape Deck Sensor Tape Deck Sensor     | 74988-001.18                    | •       | •   | •      | •   | •   | •                 | •   | •                 | •    |             | •          | •           |             |                 |                  |                     |       |     | •                  |                |
| Multituner cpl.                       | 74988-011.61<br>75981-313.16    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 | •                |                     |       |     |                    |                |
| Modulator                             | 27512-101.01                    | •       | •   | •      | •   |     | •                 | •   | •                 | •    |             |            |             |             |                 |                  |                     |       |     | •                  | •              |
| Modulator                             | 27512-103.01                    | Ť       | Ĭ   |        | Ĭ   | •   |                   | Ĭ   |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| Modulator                             | 75981-318.31                    | П       |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| Modulator                             | 75988-008.10                    |         |     |        |     |     |                   |     |                   |      |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| Power Supply                          | 27507-003.30                    | •       | •   | •      | •   | •   | •                 | •   | •                 | •    | •           | •          | •           | •           |                 |                  |                     |       |     | •                  | •              |
| Power Supply                          | 27599-003.04                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  | •                   | •     |     |                    |                |
| Power Supply PS02<br>Nicam PN01       | no spare part<br>75981-318.25   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| Nicam-Decoder                         | 27507-017.01                    |         | •   |        |     |     | •                 | •   |                   | •    |             | •          |             |             |                 |                  | •                   |       | l   |                    |                |
| NTSC-IF PF3                           | no spare part                   |         | Ĭ   |        |     |     |                   | Ĭ   |                   |      |             |            |             |             | •               |                  | Ĭ                   |       |     |                    |                |
| OIRT                                  | 72011-035.00                    |         |     |        |     |     |                   | •   |                   |      |             |            | •           |             |                 |                  |                     |       |     |                    |                |
| Secam                                 | 27507-004.01                    |         |     |        |     |     |                   |     |                   |      |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| Control Board PD01                    | no spare part                   |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     |                    |                |
| S-VHS                                 | 27599-008.00                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| S-VHS                                 | 27599-008.01                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  | •                   |       |     |                    |                |
| Tuner Tuner Board cpl.                | 29504-201.02<br>75981-316.44    |         |     |        |     |     |                   |     |                   |      |             |            |             |             | •               |                  |                     |       |     | •                  | -              |
| ··· = <b>vp.</b> ··                   | 1                               | 1       | ı   | ı      |     |     | ı                 | ı   |                   |      | 1           |            |             |             | , •             | 1                | Ì                   | . !   | ļ   | I                  | ,              |
| RP 30                                 | 27520-160.01                    | •       | •   |        | L   | L   |                   |     | L                 |      |             |            |             |             |                 |                  |                     |       |     |                    |                |
| RP 33                                 | 27520-171.01                    |         |     | •      |     | •   |                   |     |                   |      |             |            |             | •           |                 |                  |                     |       |     |                    |                |
| RP 35                                 | 27520-161.01                    |         |     |        | •   |     | •                 | •   | •                 | •    | •           | •          | •           |             | _               | •                | •                   | •     |     | •                  |                |
| RP 469                                | 75981-317.91                    |         |     |        |     |     |                   |     |                   |      |             |            |             |             |                 |                  |                     |       | ıl  |                    |                |

<sup>\*</sup> The keyboard control unit 3 is part of the keyboard control flap

Video

3.8 Grundig Service

#### Module Chart GV 500 to GV 565

| Designation  Keyboard Control   | Part No.  | GV 500 GB | GV 500 SV | GV 500 SV /1 | GV 501 VPT | GV 505 EURO | GV 506 EURO | GV 509 M | GV 510 SV | GV 511 | GV 515 EURO | GV 530 SV | GV 530 SV /1 | GV 535 EURO                | GV 540 GB | GV 540 HiFi | GV 540 NIC | GV 545 EURO | GV 560 HiFi | GV 560 HiFi /5 | GV 560HiFi LE | GV 560 NIC | GV 565 EURO |
|---|---|-----------|-----------|--------------|------------|-------------|-------------|----------|-----------|--------|-------------|-----------|--------------|----------------------------|-----------|-------------|------------|-------------|-------------|----------------|---------------|------------|-------------|
| Keyboard Control Keyboard Control   | 27599-002.42<br>27599-002.44  | •         | •         |              |            | •           |             |          | •         | •      | •           |           |              |                            |           |             |            |             |             |                |               |            |             |
| Keyboard Control  | 27599-002.45  | _         | _         |              |            | _           | •           |          | _         |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Keyboard Control  | 27599-002.46  |           |           |              |            |             | _           |          |           |        |             | •         | •            | •                          |           |             |            |             |             |                |               |            |             |
| Keyboard Control  | 27599-002.47  |           |           |              |            |             | •           |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Keyboard Control  | 27599-002.50  |           |           |              |            |             |             |          |           |        |             |           |              |                            | •         | •           | •          | •           |             |                |               |            |             |
| Keyboard Control 1  | 27599-002.48  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             | •           | •              | •             | •          |             |
| Keyboard Control 2  | 75988-031.84  |           |           |              |            |             |             |          |           |        |             |           |              |                            | •         | •           | •          | •           |             |                |               | П          |             |
| Keyboard Control 2  | *   |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             | •           |                | •             | •          |             |
| Chassis Board   | 27599-001.58  |           | •         |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.59  |           |           |              |            | •           |             |          |           |        | •           |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.60  | •         |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.61  |           |           | •            |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.62  |           |           |              |            |             |             |          |           |        |             |           | •            |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.66  |           |           |              |            |             |             |          |           |        |             |           |              | Į                          |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.68  |           |           |              |            |             |             |          |           |        |             |           |              | •                          |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.69  |           |           |              |            |             |             |          | •         |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.72  |           |           |              |            |             |             |          |           |        |             | •         |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.74  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.75  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            | •           |             |                |               |            |             |
| Chassis Board   | 27599-001.77  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.78  |           |           |              |            |             |             |          |           |        |             |           |              |                            | •         |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.81  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board   | 27599-001.84  |           |           |              | •          |             |             |          |           |        |             |           |              |                            |           |             |            |             |             | •              |               |            |             |
| Chassis Board   | 27599-001.88  | •         |           |              |            |             |             |          |           |        |             |           | •            |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board 2   | 27588-028.12  | _         | _         |              |            |             | •           |          | •         |        |             |           |              | •                          |           |             |            |             |             |                |               |            |             |
| Chassis Board 2<br>Chassis Board 2  | 27588-028.13  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
|   | 27599-004.10<br>27599-004.12  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Chassis Board 2<br>Chassis Board 2  | 27599-004.12  |           |           |              |            |             |             |          |           |        |             |           |              |                            | •         |             |            |             |             |                |               |            |             |
| Chassis Board 2   | 27599-004.13  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           | •           |            |             | •           |                | •             | •          |             |
| Edit-Control  | 27599-004.14  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             | •           | •              | •             |            | •           |
| Front Board   | no spare part   |           |           |              |            |             |             | •        |           |        |             |           |              |                            |           |             |            |             |             | _              |               |            | _           |
| Head Amplifier  | 27599-004.06  |           |           |              |            |             |             |          |           |        |             | •         | •            | •                          |           |             |            |             |             |                |               |            |             |
| Head Amplifier  | 27599-004.07  | •         | •         | •            | •          | •           | •           |          |           |        |             | _         |              |                            |           |             |            |             |             |                |               |            |             |
| Head Amplifier  | 27599-004.09  |           |           |              |            |             |             |          | •         |        | •           |           |              |                            |           |             |            |             |             |                |               |            |             |
| Head Amplifier  | 27599-004.11  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            | •           |             |                |               |            |             |
| Head Amplifier  | 27599-004.12  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             | •              |               |            |             |
| Head Amplifier  | 27599-004.15  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Tape Deck Sensor  | 75988-001.18  | •         | •         | •            | •          | •           | •           |          | •         |        | •           | •         | •            | •                          | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Main Board  | no spare part   |           |           |              |            |             |             | •        |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Modulator   | 27512-101.01  |           |           |              |            |             |             |          |           |        |             |           |              |                            |           | •           | •          | •           | •           | •              | •             | •          | •           |
| Modulator   | 27512-103.01  |           |           |              |            |             |             |          |           |        |             |           |              |                            | •         |             |            |             |             |                |               |            |             |
| Modulator   | 75988-024.04  |           |           |              |            | •           | •           |          |           |        | •           |           |              | •                          |           |             |            |             |             |                |               | П          |             |
| Modulator   | 75988-027.97  | •         |           |              |            |             |             |          |           |        |             |           |              |                            |           |             |            |             |             |                |               |            |             |
| Marilialatan  | 75000 000 74  |           |           |              |            |             |             |          | •         | •      |             | •         | •            |                            |           |             |            |             |             |                |               |            |             |
| Modulator   | 75988-032.74  |           | •         | •            | •          |             |             |          |           | •      | •           |           |              |                            |           |             |            |             |             |                |               |            |             |
| Modulator Power Supply  | 27599-003.11  | •         | •         | •            | •          | •           |             |          | _         |        |             |           |              | $\mathbf{\mathbf{\omega}}$ |           |             |            |             |             |                |               |            |             |
| Power Supply<br>Power Supply  |   | •         | •         | •            | •          | •           | •           |          |           |        |             | •         | •            |                            |           |             |            |             |             |                |               |            |             |
| Power Supply  | 27599-003.11  | •         | •         | •            | •          | •           | •           |          |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply<br>Power Supply  | 27599-003.11<br>27599-003.12  | •         | •         | •            | •          | •           | •           |          |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply  | 27599-003.11<br>27599-003.12<br>27599-003.14  | •         | •         | •            | •          | •           | •           |          |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam  | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-006.51  | •         | •         | •            | •          | •           | •           |          |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT  | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-006.51<br>27599-009.00  | •         |           |              |            |             | •           |          |           |        |             |           | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT  | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-006.51<br>27599-009.00<br>27599-009.01  | •         |           |              | •          | •           | •           |          |           |        |             |           |              |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier  | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-006.51<br>27599-009.00<br>27599-009.01<br>no spare part   | •         |           |              |            |             | •           | •        |           |        |             |           | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit   | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-006.51<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45   |           |           |              |            | •           | •           | •        |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext                                  | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00   |           |           |              |            | •           | •           | •        |           |        |             | •         | •            |                            | •         | •           | •          | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext Terminal Board                   | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00<br>no spare part                                |           |           |              |            |             |             | •        |           |        |             | •         |              | •                          | •         | •           |            | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext Terminal Board Tuner             | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00<br>no spare part<br>27512-201.01                |           |           |              |            | •           |             | •        | •         | •      | •           | •         |              | •                          | •         | •           |            | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext Terminal Board                   | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00<br>no spare part                                |           |           | •            |            | •           |             | •        | •         | •      | •           | •         |              | •                          | •         | •           |            | •           | •           | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext Terminal Board Tuner Video Board | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00<br>no spare part<br>27512-201.01<br>kein E-Teil | •         |           |              |            |             | •           | •        |           |        |             |           | •            | •                          |           |             | •          |             |             | •              | •             | •          | •           |
| Power Supply Power Supply Power Supply Nicam-Decoder Nicam-Decoder O-Secam O-VPT O-VPT Pre/Rec Amplifier Synchro-Edit Teletext Terminal Board Tuner             | 27599-003.11<br>27599-003.12<br>27599-003.14<br>27599-006.01<br>27599-006.02<br>27599-009.00<br>27599-009.01<br>no spare part<br>75988-028.45<br>27599-009.00<br>no spare part<br>27512-201.01<br>kein E-Teil | •         |           |              |            |             | •           | •        |           |        |             |           | •            | •                          |           |             | •          |             |             | •              | •             | •          | •           |

<sup>\*</sup> integrated in the keyboard control flap, part no. ......

Grundig Service

Video

3.9

### Module Chart GV 5000 to GV 5695

| Designation [         | <sup>⊃</sup> art No.   | GV 5000 | GV 5000 EURO | GV 5000 GB | GV 5000 SAA | GV 5000 SV | GV 5000 VPS | 3V 5000 VPS /5 | GV 5002 VPS | 3V 5003 | GV 5008 SV   | 3V 5050 | GV 5050 SV | 3V 5050 SV /1 | GV 5055 EURO | GV 5095 SV | 3V 5095 SV /1 | GV 5300 | GV 5300 VPS | GV 5300 VPS /5 | 3V 5305 EURO | GV 5395 SV | GV 5395 SV /1 | GV 5400 EURO | GV 5400 HiFi | GV 5400 NIC | GV 5695 HiFi |
|-----------------------|------------------------|---------|--------------|------------|-------------|------------|-------------|----------------|-------------|---------|--------------|---------|------------|---------------|--------------|------------|---------------|---------|-------------|----------------|--------------|------------|---------------|--------------|--------------|-------------|--------------|
| Keyboard Control 2759 | 99-002.40              | •       | •            | ě          | ě           | ě          | •           | Ŏ              | •           | •       | •            | Ĭ       |            |               |              |            |               | •       | •           | •              | •            |            |               |              |              |             |              |
|                       | 99-002.41              |         |              |            |             |            |             |                |             |         |              | •       | •          | •             | •            |            |               |         |             |                |              |            |               |              |              |             |              |
| Keyboard Control 2759 | 99-002.43              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              | •          | •             |              |              |             |              |
|                       | 99-002.45              |         |              |            |             |            |             |                |             |         |              |         |            |               |              | •          | •             |         |             |                |              |            |               |              |              |             |              |
|                       | 99-002.47              |         |              |            |             |            |             |                |             |         |              |         |            |               |              | •          | •             |         |             |                |              |            |               |              |              |             |              |
|                       | 99-002.53              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               | •            | •            | •           |              |
|                       | 99-002.51              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             | •            |
|                       | 99-001.51              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.52              |         |              |            |             |            |             | •              |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.53              | •       |              |            |             |            |             |                |             | •       |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.54              |         |              |            |             | •          | •           |                | •           |         | •            |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.55              |         |              |            | •           |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.57              |         | •            |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.58              |         |              |            |             |            |             |                |             |         |              |         | •          |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.59              |         |              |            |             |            |             |                |             |         |              |         |            |               | •            |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.61              |         |              |            |             |            |             |                |             |         |              |         |            | •             |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.63              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              | •          |               |              |              |             |              |
|                       | 99-001.64              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.67              |         |              |            |             |            |             |                |             |         |              |         |            |               |              | •          |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.69              |         |              |            |             |            |             |                |             |         |              | •       |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.70              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            | •             |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.73              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                | •            |            |               |              |              |             |              |
|                       | 99-001.79              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             | •            |
|                       | 99-001.82              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.83              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               | •       |             |                |              |            |               |              |              |             |              |
|                       | 99-001.86              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-001.87              |         |              |            |             |            |             |                |             |         |              |         | •          |               |              |            |               |         |             |                |              |            |               |              | •            | •           |              |
|                       | 88-028.12              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 38-028.13              |         |              |            |             |            |             |                |             |         |              |         |            |               | •            |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-004.12              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            | •             |              |              |             |              |
|                       | 99-004.06              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               | _       | _           |                | •            | •          | _             |              |              |             |              |
|                       | 99-004.07              |         |              |            | •           |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-004.08<br>99-004.16 |         |              | •          | •           |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-004.16              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              | •            |             |              |
|                       | 99-004.17              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       |                        |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 38-018.22              | _       | _            | _          | _           | _          | _           | •              | _           | _       |              |         | •          |               | •            |            |               | _       | _           |                | _            | •          |               |              |              |             |              |
|                       | 38-001.18              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 12-101.01<br>38-024.04 |         |              |            |             |            |             |                |             |         |              |         |            |               | •            |            |               |         |             |                |              |            |               |              |              | _           |              |
|                       | 38-024.04<br>38-024.09 |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 38-024.09<br>38-032.74 |         |              |            |             |            |             |                |             |         |              | •       | •          |               |              |            | •             |         |             |                |              | •          | •             |              |              |             |              |
|                       | 38-324.06              | •       |              | •          | •           |            | •           |                | •           | •       | •            | Ŭ       |            |               |              |            |               | •       | •           |                | •            |            |               |              |              |             |              |
|                       | 88-003.10              | •       | •            | •          | •           | •          | •           | •              | •           | •       | •            |         |            |               |              |            |               | •       | •           |                | •            |            |               |              |              |             |              |
|                       | 99-003.11              |         |              |            |             |            |             |                |             |         |              | •       |            |               | •            |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-003.11              |         |              |            |             |            |             |                |             |         |              |         |            |               |              | •          | •             |         |             |                |              | •          | •             |              |              |             |              |
|                       | 99-003.12              |         |              |            |             |            |             |                |             |         |              |         | •          | •             |              |            |               |         |             |                |              |            |               |              |              |             |              |
|                       | 99-003.14              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               | •            | •            | •           | •            |
|                       | 99-006.01              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              | •           |              |
|                       | 99-006.02              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               | •            |              |             |              |
|                       | 99-009.00              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             | •            |
|                       | 99-006.51              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               | •            |              |             |              |
|                       | 99-009.00              |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             | •            |
|                       | 12-201.01              | •       | •            | •          | •           | •          | •           | •              | •           | •       | •            | •       | •          | •             | •            | •          | •             | •       | •           | •              | •            | •          | •             | •            | •            | •           | •            |
|                       |                        |         |              |            |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |
| RP 150   7598         | 38-324.03              | •       | lacktriangle | ullet      | ullet       | ullet      | ullet       | lacktriangle   | ullet       | ullet   | lacktriangle |         |            |               |              |            |               | ullet   | ullet       | lacktriangle   | ullet        |            |               |              |              |             |              |
| RP 500 7598           | 38-010.71              |         |              |            |             |            |             |                |             |         |              | •       | •          | •             | •            | •          | •             |         |             |                |              | •          | •             | •            |              |             | •            |
| RP 540 7598           | 88-010.73              | _       |              | _          |             |            |             |                |             |         |              |         |            |               |              |            |               |         |             |                |              |            |               |              |              |             |              |

Video

### Module Chart GV 201-1, GV 25, GV 45, KV 5..., SE 51..

| Designation        | Part No.     | GV 201-1     | GV 25 SV /5 | GV 45 SV /5 | KV5001 VPS /5 | KV5301 VPS /5 | SE 5102 SV | SE 5104 SV | SE 5106 HIFI |  |
|--------------------|--------------|--------------|-------------|-------------|---------------|---------------|------------|------------|--------------|--|
| Keyboard Control   | 27599-002.40 | <del> </del> | ĕ           | ĕ           | _             |               | 10,        | 0,         | Ŭ            |  |
| Keyboard Control   | 27599-002.43 |              |             |             |               |               |            | •          |              |  |
| Keyboard Control   | 27599-002.45 |              |             |             |               |               | •          |            |              |  |
| Keyboard Control   | 27599-002.47 |              |             |             |               |               |            |            |              |  |
| Keyboard Control   | 27599-002.52 | •            |             |             |               |               |            |            |              |  |
| Keyboard Control   | 27599-002.61 |              |             |             |               | •             |            |            |              |  |
| Keyboard Control 1 | 27599-002.51 |              |             |             |               |               |            |            | •            |  |
| Chassis Board      | 27599-001.51 |              |             |             |               |               |            |            |              |  |
| Chassis Board      | 27599-001.52 | П            | •           |             | •             |               |            |            |              |  |
| Chassis Board      | 27599-001.63 |              |             |             |               |               |            | •          |              |  |
| Chassis Board      | 27599-001.67 | П            |             |             |               |               | •          |            |              |  |
| Chassis Board      | 27599-001.79 |              |             |             |               |               |            |            |              |  |
| Chassis Board      | 27599-001.85 | •            |             |             |               |               |            |            |              |  |
| Chassis Board 2    | 27588-028.12 |              |             |             |               |               |            | •          |              |  |
| Chassis Board 2    | 27599-004.12 |              |             |             |               |               |            |            | •            |  |
| Head Amplifier     | 27599-004.06 |              |             |             |               |               |            | •          |              |  |
| Head Amplifier     | 27599-004.07 | •            | •           |             | •             |               | •          |            |              |  |
| Tape Deck Sensor   | 75988-018.22 |              |             |             |               |               |            |            |              |  |
| Tape Deck Sensor   | 75988-001.18 |              |             |             |               |               | •          | •          | •            |  |
| Modulator          | 27512-101.01 |              |             |             |               |               |            |            |              |  |
| Modulator          | 75988-024.09 |              | •           | •           | •             | •             |            |            |              |  |
| Modulator          | 75988-032.74 |              |             |             |               |               |            | •          |              |  |
| Modulator          | 75988-324.06 | •            |             |             |               |               |            |            |              |  |
| Power Supply       | 27599-003.10 | •            |             |             |               |               |            |            |              |  |
| Power Supply       | 27599-003.12 |              |             |             |               |               | •          | •          |              |  |
| Power Supply       | 27599-003.14 |              |             |             |               |               |            |            |              |  |
| Teletext           | 27599-009.00 |              |             |             |               |               |            |            | •            |  |
| Tuner              | 27512-201.01 |              |             |             |               |               |            |            |              |  |
| RP 150             | 75988-324.03 |              |             | •           | •             | •             |            |            |              |  |
| RP 500             | 75988-010.71 |              |             |             |               |               |            | •          |              |  |
| RP 540             | 75988-010.73 |              |             |             |               |               |            |            | •            |  |

Video

### Module Chart GV 600 to GV 690

| Designation     | Part No.                     | GV 600 SV | GV 600 SV/1 | 605 | , 609 | > |   | / 635 | 640 | GV 640 NIC | GV 645 EURO | .650 | GV 660 HiFi |   | GV 665 EURO | GV 670 S NIC | N 670S | S 069 A | GV 690 S NIC |
|-----------------|------------------------------|-----------|-------------|-----|-------|---|---|-------|-----|------------|-------------|------|-------------|---|-------------|--------------|--------|---------|--------------|
| Tuner/Modulator | 75988-035.54                 |           |             |     |       |   |   |       | •   | •          |             | •    | •           | • |             | •            | •      | •       | •            |
| Tuner/Modulator | 75988-038.38                 |           |             |     |       |   |   |       |     |            | •           |      |             |   | •           |              |        |         |              |
| Tuner/Modulator | 75988-039.41                 | •         | •           |     |       | • | • |       |     |            |             |      |             |   |             |              |        |         |              |
| Tuner/Amplifier | 75988-038.76                 |           |             | •   |       |   |   | •     |     |            |             |      |             |   |             |              |        |         |              |
| RP 500          | 75000 040 74                 | •         |             |     |       |   |   |       |     |            |             |      | I 1         | ı | ı           | ı            | I 1    |         |              |
| RP 500 F        | 75988-010.71<br>75988-010.72 |           | _           |     |       | _ |   |       | _   |            |             |      |             |   |             |              |        |         |              |
|                 |                              |           |             |     |       |   |   |       |     |            |             |      |             |   |             |              |        |         |              |
| RP 540          | 75988-010.73                 |           |             |     |       |   |   |       |     |            |             | •    | •           | • |             | •            | •      | _       | _            |
| RP 540 F        | 75988-010.74                 |           |             |     |       |   |   |       |     |            |             |      |             |   |             |              |        |         |              |
| RP 609M         | 75988-034.00                 |           |             |     | •     |   |   |       |     |            |             |      |             |   |             |              |        |         |              |

#### Module Chart GV 6000 to GV 6596

| Designation     | Part No.     | GV 6000 EURO | 0009 / | 0009 / | GV 6001 V+ | 9909 / | 9609, | 9609 / | , 6300 |   | GV 6300 SV/1 | GV 6396 VPT | GV 6400 EURO | GV 6400 HiFi | / 6400 | √ 6400 | V 6401 | V 6596 | GV 6596 NIC |
|-----------------|--------------|--------------|--------|--------|------------|--------|-------|--------|--------|---|--------------|-------------|--------------|--------------|--------|--------|--------|--------|-------------|
| Tuner/Modulator | 75988-035.54 |              |        |        |            |        |       |        |        |   |              |             |              |              |        |        |        | •      | •           |
| Tuner/Modulator | 75988-037.21 |              |        |        | •          |        |       |        |        |   |              |             |              |              |        |        | •      |        |             |
| Tuner/Modulator | 75988-037.27 | •            |        |        |            |        |       |        | •      |   |              |             | •            |              |        |        |        | 1      |             |
| Tuner/Modulator | 75988-037.87 |              | •      | •      |            |        |       |        |        | • | •            |             |              | •            |        | •      |        |        |             |
| Tuner/Modulator | 75988-038.83 |              |        |        |            |        |       |        |        |   |              |             |              |              | •      |        |        | 1      |             |
| Tuner/Modulator | 75988-039.41 |              |        |        |            |        | •     |        |        |   |              | •           |              |              |        |        |        |        |             |
|                 |              |              |        |        | _          |        |       |        |        |   |              |             |              | _            |        |        |        |        |             |
| RP 160          | 75988-010.91 |              | •      | •      | •          | •      |       |        |        | • | •            |             |              | •            | •      | •      |        | 1      |             |
| RP 160 F        | 75988-010.92 | •            |        |        |            |        |       |        |        |   |              |             | •            |              |        |        |        |        |             |
| RP 500          | 75988-010.71 |              |        |        |            |        |       |        |        |   |              |             |              |              |        |        |        |        |             |
| RP 540          | 75988-010.73 |              |        |        |            |        |       |        |        |   |              | •           |              |              |        |        |        | •      |             |

### Module Chart GVP 600, GV 26, GV 46, SE 61..

| Designation      | Part No.                     | GVP 600 ICN EURO | GV 26 | GV 26 EURO | GV 26 VPS | GV 46 | GV 46 VPS | SE 6102 SV | 6104 | SE 6106 HIFI |
|------------------|------------------------------|------------------|-------|------------|-----------|-------|-----------|------------|------|--------------|
| Tuner/Modulator  | 75988-035.54                 |                  |       |            |           |       |           |            |      | •            |
| Tuner/Modulator  | 75988-037.27                 |                  |       | •          |           |       |           |            |      |              |
| Tuner/Modulator  | 75988-037.87                 |                  | •     |            | •         | •     | •         |            |      |              |
| Tuner/Modulator  | 75988-039.41                 |                  |       |            |           |       |           | •          | •    |              |
| RP 150<br>RP 160 | 75988-324.03<br>75988-010.91 | •                | •     |            | •         | •     |           |            |      |              |
| RP 160 F         | 75988-010.92                 |                  |       | •          |           |       |           |            |      |              |
| RP 500           | 75988-010.71                 |                  |       |            |           |       |           | •          |      |              |
| RP 540           | 75988-010.73                 |                  |       |            |           |       |           |            | •    | •            |

Video

# **Headwheels and Head Cylinders (Part 1)**

| Type of VCR                          | Heads  | Headwheel             | Head Cylinder |
|--------------------------------------|--------|-----------------------|---------------|
| Type of Volt                         | Tieaus | Part No.              | Part No.      |
| VS 500, 505, 510, 5180               | 2      | 47226-020.01          | 47226-043.50  |
| VS 520, 525, 530                     | 3      | 47226-021.01          | 47226-044.00  |
| VS 540, 545, 5480                    | 4      | 47226-022.01          | 47226-042.00  |
| VS 550                               | 4      | 47226-023.01          | 47226-045.50  |
| VS 600, 610, 6190                    | 2      | 47226-020.01          | 47226-043.50  |
| VS 620, 630, 640, 645                | 4      | 47226-023.01          | 47226-045.50  |
| VS 650                               | 7      | 75986-210.22          | 75986-210.21  |
| VS 660, 665, 6690                    | 6      | 75986-210.08          | 75986-210.07  |
| VS 680                               | 7      | 75986-208.28          | 75986-208.27  |
| VS 700, 705, 7000                    | 2      | 47226-020.01          | 47226-043.50  |
| VS 710, 715, 720, 7200               | 3      | 75986-209.19          | 75986-209.18  |
| VS 740, 7400                         | 4      | 47226-022.01          | 47226-042.00  |
| VS 790                               | 4      | 47226-023.01          | 47226-045.50  |
| VS 800, 805, 810, 815                | 3      | 75986-209.19          | 75986-209.18  |
| VS 900, 901, 902, 905, 9091          | 2      | 47226-020.01          | 47226-043.50  |
| VS 910, 915, 920, 922, 925, 9291     | 3      | 75986-209.19          | 75986-209.18  |
| VS 930                               | 4      | 47226-023.01          | 47226-045.50  |
| VS 940, 9491                         | 6      | 75986-210.08          | 75986-210.07  |
| VS 960                               | 7      | 75987-265.21          | 75987-265.20  |
| VO 300                               | 1 ' 1  | 75307-205.21          | 75307-205.20  |
| GV 200, 201, 206, 2092               | 2      | 47226-020.01          | 47226-043.50  |
| GV 201-1                             | 2      | 27599-005.07          | 75988-001.23  |
| GV 204 (2-head variant)              | 2      | 47226-020.01 / 021.01 | 47226-043.50  |
| GV 204 (3-head variant)              | 3      | 47226-021.02          | 47226-041.53  |
| GV 210, 211, 220, 2292               | 3      | 47226-021.02          | 47226-041.53  |
| GV 216                               | 3      | 75986-209.19          | 75986-209.18  |
| GV 230, 2392                         | 4      | 75986-210.44          | 75986-210.43  |
| GV 240, 250, 255, 2492               | 6      | 75986-210.31          | 75986-210.30  |
| GV 280S VPT, GV 280S PC              | 7      | 75986-208.28          | 75986-208.27  |
| GV 400, 400 Ost, 400 VPS, 401 VPT,   |        |                       |               |
| 402, 404 SV, 405 EURO, 406 EURO,     |        |                       |               |
| 4000 VPS, 4092 VPS, 4092 SV          | 2      | 27599-005.00          | 75988-001.33  |
| GV 400 GB                            | 2      | 27599-005.07          | 75988-001.33  |
| GV 409 M                             | 2      | 75981-307             | 7.13          |
| GV 410, 410 VPS, 411, 411 Ost, 412,  |        |                       |               |
| 414 SV, GV 415 EURO, 416 EURO,       |        |                       |               |
| 4192 SV, 420 VPT                     | 3      | 27599-005.01          | 75988-002.29  |
| GV 411-1, 411-2                      | 6      | 27599-005.10          | 75988-002.31  |
| GV 430, 434 SV                       | 4      | 27599-005.02          | 75988-002.30  |
| GV 440, 450, 4592 VPT, 460, 464,     |        |                       |               |
| 465 EURO                             | 6      | 27599-005.03          | 75988-002.31  |
| GV 469 M                             | 6      | 75981-317.04          | 75981-317.03  |
| GV 470S, 470 PC                      | 7      | 27599-005.04          | 75988-002.32  |
| GV 500 GB, 5000 SAA                  | 2      | 27599-005.07          | 75988-001.33  |
| GV 5000 GB                           | 2      | 27599-005.16          | 75988-001.33  |
| GV 500 SV(/1), 501 VPT, 505 EURO,    |        |                       |               |
| 506 EURO, 5000 (VPS (/5)), 5002 VPS, |        |                       |               |
| 5003, 5008, 5050 SV(/1), 5055 EURO,  |        |                       |               |
| 5095 SV(/1),                         | 2      | 27599-005.08          | 75988-001.33  |
| GV 510 SV, 511, 515 EURO             | 3      | 27599-005.11          | 75988-002.29  |
| GV 530, 535 EURO,                    |        |                       |               |
| 5300 (VPS (/5)), 5395 SV(/1)         | 4      | 27599-005.14          | 75988-023.02  |
| GV 5305 EURO                         | 4      | 27599-005.15          | 75988-023.02  |
| GV 540, 5400 HiFi, GV 5400 NIC       |        |                       |               |
| 560 (HiFi/5), 5695                   | 6      | 27599-005.10          | 75988-002.31  |
| GV 5400 EURO, 545 EURO, 565 EURO     | 6      | 27599-005.18          | 75988-002.31  |
| ,                                    | -      |                       |               |

Video

# **Headwheels and Head Cylinders (Part 2)**

|                                       |   |              | i               |  |  |  |  |  |  |
|---------------------------------------|---|--------------|-----------------|--|--|--|--|--|--|
| Type of VCR                           |   | Headwheel    | Head Cylinder   |  |  |  |  |  |  |
|                                       |   | Part No.     | Part No.        |  |  |  |  |  |  |
| GV 600, 605, 6000, 6001, 6066         | 2 | 27599-005.08 | 75988-023.03    |  |  |  |  |  |  |
| GV 609 M                              | 2 | 75988-034.06 | 75988-034.51 *) |  |  |  |  |  |  |
| GV 6096                               | 2 | 27599-005.08 | 75988-023.03    |  |  |  |  |  |  |
| GV 630, 6300 SV(/1), 6396 VPT         | 4 | 27599-005.14 | 75988-023.05    |  |  |  |  |  |  |
| GV 635 EURO, 6300 EURO                | 4 | 27599-005.15 | 75988-023.05    |  |  |  |  |  |  |
| GV 640, 6400 HiFi(/5), 6400 NIC, 6401 | 6 | 27599-005.19 | 75988-023.06    |  |  |  |  |  |  |
| GV 645 EURO, 6400 EURO                | 6 | 27599-005.20 | 75988-023.06    |  |  |  |  |  |  |
| GV 650, 6596                          | 6 | 27599-005.19 | 75988-023.06    |  |  |  |  |  |  |
| GV 660                                | 7 | 27599-005.19 | 75988-023.07    |  |  |  |  |  |  |
| GV 665 EURO                           | 7 | 27599-005.20 | 75988-023.07    |  |  |  |  |  |  |
| GV 670                                | 6 | 27599-005.19 | 75988-023.06    |  |  |  |  |  |  |
| GV 690                                | 7 | 27599-005.19 | 75988-023.07    |  |  |  |  |  |  |
|                                       |   | •            | •               |  |  |  |  |  |  |
| GV 709 M, 729 M                       | 2 | 75988-323.37 | 75988-323.36 *) |  |  |  |  |  |  |
|                                       |   |              | ·               |  |  |  |  |  |  |
| GV 25 SV/5                            | 2 | 27599-005.08 | 75988-001.33    |  |  |  |  |  |  |
| GV 26                                 | 2 | 27599-005.08 | 75988-023.03    |  |  |  |  |  |  |
| GV 45 SV/5                            | 4 | 27599-005.12 | 75988-023.02    |  |  |  |  |  |  |
| GV 46                                 | 4 | 27599-005.14 | 75988-023.05    |  |  |  |  |  |  |
|                                       |   | •            | •               |  |  |  |  |  |  |
| GVP 600 ICN EURO                      | 2 | 27599-005.08 | 75988-001.33    |  |  |  |  |  |  |
|                                       |   |              |                 |  |  |  |  |  |  |
| KV 5001 VPS/5                         | 2 | 27599-005.08 | 75988-001.33    |  |  |  |  |  |  |
| KV 5301 VPS/5                         | 4 | 27599-005.14 | 75988-023.02    |  |  |  |  |  |  |
|                                       |   | •            | •               |  |  |  |  |  |  |
| MV 4005                               | 2 | 27599-005.00 | 75988-001.33    |  |  |  |  |  |  |
| MV 4105                               | 3 | 27599-005.01 | 75988-002.29    |  |  |  |  |  |  |
|                                       |   |              |                 |  |  |  |  |  |  |
| SE 2100 VPS                           | 2 | 47226-020.01 | 47226-043.50    |  |  |  |  |  |  |
| SE 2120 VPT                           | 3 | 47226-021.02 | 47226-041.53    |  |  |  |  |  |  |
| SE 4100 VPS, 4104 SV                  | 2 | 27599-005.00 | 75988-001.33    |  |  |  |  |  |  |
| SE 4120 SV                            | 3 | 27599-005.01 | 75988-002.29    |  |  |  |  |  |  |
| SE 5102 SV                            | 2 | 27599-005.08 | 75988-001.33    |  |  |  |  |  |  |
| SE 5104 SV                            | 4 | 27599-005.14 | 75988-023.02    |  |  |  |  |  |  |
| SE 5106 HiFi                          | 6 | 27599-005.10 | 75988-002.31    |  |  |  |  |  |  |
| SE 5110 VPS                           | 2 | 47226-020.01 | 47226-043.50    |  |  |  |  |  |  |
| SE 5140 VPS                           | 4 | 47226-022.01 | 47226-042.00    |  |  |  |  |  |  |
| SE 6102 SV                            | 2 | 27599-005.08 | 75988-023.03    |  |  |  |  |  |  |
| SE 6104 VPT                           | 4 | 27599-005.14 | 75988-023.05    |  |  |  |  |  |  |
| SE 6106 HiFi                          | 6 | 27599-005.19 | 75988-023.06    |  |  |  |  |  |  |
| SE 6110 VT                            | 2 | 47226-020.01 | 47226-043.50    |  |  |  |  |  |  |
| SE 6160 VPT                           | 6 | 75986-210.08 | 75986-210.07    |  |  |  |  |  |  |
| SE 7120 VPT                           | 3 | 75986-209.19 | 75986-209.18    |  |  |  |  |  |  |
| SE 9100 VPS                           | 2 | 47226-020.01 | 47226-043.50    |  |  |  |  |  |  |
| SE 9120 VPT                           | 3 | 75986-209.19 | 75986-209.18    |  |  |  |  |  |  |
|                                       |   |              |                 |  |  |  |  |  |  |

<sup>\*) =</sup> scanner cpl.

Video

3.14 Grundig Service

### Service Manuals GV 200 to GV 280

|  | Drive Mechanism | Drive Mechanism | Service Manual | Supplement   | Service Manual | Supplement   | Service Manual | Service Manual                 | Supplement   | Service Manual | Service Manual | Service Manual | Supplement   | Safety                           |
|--|-----------------|-----------------|----------------|--------------|----------------|--------------|----------------|--------------------------------|--------------|----------------|----------------|----------------|--------------|----------------------------------|
| VCR  | 72010-506.75    | 72010-509.90    | 72010-510.95   | 72010-510.96 | 72010-511.45   | 72010-511.46 | 72010-511.85   | <ul><li>72010-512.00</li></ul> | 72010-512.01 | 72010-512.02   | 72010-512.90   | 72010-519.00   | 72010-519.01 | <b>•</b> • <b>•</b> 72010-800.00 |
| GV 200   |                 | • (             |                |              |                |              |                | • (                            |              |                |                |                |              | •                                |
| GV 200<br>GV 200 GB<br>GV 200 VPS<br>GV 201 GB<br>GV 201 VPT<br>GV 211-1<br>GV 204<br>GV 210<br>GV 210 VPS<br>GV 211<br>GV 221 PDC |                 |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |
| GV 200 VF3   |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              |                                  |
| GV 201 VPT   |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| GV 211-1   |                 | •               |                |              |                |              |                |                                |              |                |                | •              | •            | •                                |
| GV 204   |                 | •               |                |              |                |              |                | •                              |              | •              |                |                |              |                                  |
| GV 210   |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| GV 210 VPS   |                 | •               |                |              |                |              |                | • • •                          | •            |                |                |                |              | •                                |
| GV 220 PDC   |                 |                 |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| GV 211<br>GV 220 PDC<br>GV 220 VPT<br>GV 230 VPT<br>GV 240 GB<br>GV 240 NIC  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| GV 230 VPT   | •               |                 |                |              |                |              |                |                                |              |                | •              |                |              | •                                |
| GV 240 GB  |                 | •               |                |              | •              |              |                |                                |              |                |                |                |              | •                                |
| GV 240 NIC   |                 | •               |                |              | •              |              |                |                                |              |                |                |                |              | •                                |
| GV 240 VPT<br>GV 250   |                 |                 |                |              | •              |              |                |                                |              |                |                |                |              | •                                |
| GV 250 E   | •               |                 |                |              |                |              | •              |                                |              |                |                |                |              | •                                |
| GV 250 GB  | •               |                 |                |              |                |              | •              |                                |              |                |                |                |              | •                                |
| GV 250 NIC   | •               |                 |                |              |                |              | •              |                                |              |                |                |                |              |                                  |
| GV 250 VPT   |                 |                 |                |              |                |              | •              |                                |              |                |                |                |              | •                                |
| GV 280 PC  | •               |                 | •              | •            |                |              |                |                                |              |                |                |                |              | •                                |
| GV 280 S FT/NIC  | •               |                 | •              |              |                |              |                |                                |              |                |                |                |              | •                                |
| GV 280 S T/NIC/E   | •               |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |
| GV 280 S T/NIC/GB<br>GV 280 S VPT  | •               |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |
| GV 200 G VF 1  |                 |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |
| GV 2092 VPS / Barcelona  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| GV 2292 VPT / Florenz  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              |                                  |
| GV 2392 VPT / Valencia   | •               |                 |                |              |                |              |                |                                |              |                | •              |                |              | •                                |
| GV 2492 VPT / Madrid   |                 |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |
| MV 2005  | l               | •               |                |              | l              | l            |                | •                              |              | l              |                |                | 1 1          |                                  |
| MV 2105  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              |                                  |
| MV 2115  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| MV 2505  | •               |                 |                |              |                |              | •              |                                |              |                |                |                |              |                                  |
| SE 2100 VPS  |                 | •               |                |              |                |              |                | •                              |              |                |                |                |              | •                                |
| SE 2120 VPT  |                 |                 |                |              |                |              |                |                                |              |                |                |                |              |                                  |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

Grundig Service 3.15

Video

### Service Manuals GV 400 to GV 470 (Part 1)

|   |                                    |              |              |                |              |              |                |              |              |                |                | _              | •              |              |                | ,              |  |
|---|------------------------------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|----------------|----------------|----------------|--------------|----------------|----------------|--|
|   | Service Manual                     | Supplement   | Supplement   | Service Manual | Supplement   | Supplement   | Service Manual | Supplement   | Supplement   | Service Manual | Service Manual | Service Manual | Service Manual | Supplement   | Service Manual | Service Manual | Safety                                       |
| VCR<br>GV 400   | <ul><li>● ● 72010-514.80</li></ul> | 72010-514.81 | 72010-514.82 | 72010-514.85   | 72010-514.86 | 72010-514.88 | 72010-514.90   | 72010-514.91 | 72010-514.92 | 72010-516.15   | 72010-516.20   | 72010-517.05   | 72010-517.10   | 72010-517.11 | 72010-524.00   | 72010-524.15   |  |
| GV 400 GB<br>GV 400 EAST<br>GV 400 VPS<br>GV 401 VPT<br>GV 402<br>GV 403<br>GV 404 SV   | •                                  | •            | •            | • • •          |              | •            |                |              |              |                |                |                |                |              |                |                | <ul><li>● ● ● ● ● ● ● 72010-800.00</li></ul> |
| GV 405 EURO<br>GV 406 EURO<br>GV 407<br>GV 409 M<br>GV 410<br>GV 410 VPS<br>GV 411      | •                                  |              | •            | • • •          |              | •            |                |              |              | •              |                |                |                |              |                |                | • • • • • • •                                |
| GV 411 OST<br>GV 411-1<br>GV 411-2<br>GV 412<br>GV 414 SV<br>GV 415 EURO<br>GV 416 EURO | •                                  |              |              | • • •          |              |              |                |              |              |                |                |                |                |              | •              | •              | •  |
| GV 417<br>GV 420 VPT<br>GV 430<br>GV 430 GB<br>GV 430 VPS<br>GV 434 SV<br>GV 435 EURO   | •                                  | •            | •            | • • • • •      | •            | •            |                |              |              |                |                |                |                |              |                |                |  |
| GV 437<br>GV 440 NIC<br>GV 440 VPS<br>GV 450<br>GV 450 GB<br>GV 450 NIC<br>GV 450 VPT   |                                    |              | •            | •              |              | •            | • • • • •      |              |              |                |                |                |                |              |                |                | • • • • • •                                  |
| GV 450 OIRT<br>GV 460 NIC<br>GV 460 VPT<br>GV 464 HiFi<br>GV 464 NIC<br>GV 464 OIRT     |                                    |              |              |                |              |              |                | •            | •            |                |                |                |                |              |                |                | •  |
| GV 465 EURO<br>GV 469 M<br>GV 470 PC<br>GV 470S NIC<br>GV 470S VPT                      |                                    |              |              |                |              |              |                |              |              |                | •              |                | •              | •            |                |                | •  |

Video

# Service Manuals GV 400 to GV 470 (Part 2)

|   | Service Manual           | Supplement   | Supplement   | Service Manual | Supplement   | Supplement   | Supplement   | Service Manual | Supplement   | Safety         |
|---|--------------------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|----------------|
| VCR   | <b>• • 7</b> 2010-514.80 | 72010-514.81 | 72010-514.82 | 72010-514.85   | 72010-514.86 | 72010-514.87 | 72010-514.88 | 72010-514.90   | 72010-514.91 | ● 72010-800.00 |
| GV 4000 VPS                                 | •                        | •            |              |                |              |              |              |                |              | •              |
| GV 4001                                     | •                        |              | •            |                |              |              | •            |                |              | •              |
| GV 4002 VPS                                 |                          |              | •            |                |              |              | •            |                |              | •              |
| GV 4003 VPS                                 | •                        |              | •            |                |              |              |              |                |              | •              |
| GV 4010 SV-VPT                              |                          |              |              | •              |              | •            | •            |                |              | •              |
| GV 4092 SV / Barcelona                      |                          |              |              |                |              |              |              |                |              |                |
| GV 4092 VPS / Barcelona                     |                          |              |              | •              |              |              |              |                |              | •              |
| GV 4192 SV / Florenz                        |                          |              |              | •              |              |              |              |                |              | •              |
| GV 4200 SV-VPT                              |                          |              |              | •              |              | •            | •            |                |              | •              |
| GV 4592 VPT / Madrid<br>GV 4592 SV / Madrid |                          |              |              |                |              |              |              |                |              |                |
| GV 4592 SV / Wadild                         | l                        |              |              |                |              |              |              |                |              | •              |
| MV 4005                                     | I 🕳                      | ı            | ı            | ı              | ı            | ı            | ı            | ı              | ı            | ا 🕳 ا          |
| MV 4105                                     | •                        |              |              |                |              |              |              |                |              | •              |
| 1414 1100                                   |                          |              |              |                |              |              |              |                |              |                |
| SE 4100 VPS                                 |                          |              |              | •              |              |              |              |                |              | •              |
| SE 4104 SV                                  |                          |              |              | •              | •            |              |              |                |              | •              |
| SE 4120 SV                                  |                          |              |              | •              |              |              |              |                |              | •              |

# **Service Manuals GV 25, GV 26, GV 45 & GV 46**

|                     | _              | _            | _              | _              |                      |
|---------------------|----------------|--------------|----------------|----------------|----------------------|
|                     | Service Manual | Supplement   | Service Manual | Service Manual | Safety               |
| VCR                 | 72010-519.00   | 72010-519.01 | 72010-527.25   | 72010-527.40   | ● ● ● ● 72010-800.00 |
| GV 25 SV/5          | •              | •            |                |                | •                    |
| GV 45 SV/5          | •              | •            |                |                | •                    |
| GV 45 SV/5<br>GV 26 |                |              | •              |                | •                    |
| しっく ノロ ヒロドロ         |                |              |                | •              | •                    |
| GV 26 VPS<br>GV 46  |                |              | •              |                | lacktriangle         |
| GV 46               |                |              | •              |                | lacktriangle         |
| GV 46 VPS           |                |              |                |                |                      |

Video

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

### Service Manuals GV 5.. Series

|   | Service Manual | Service Manual | Supplement   | Supplement   | Supplement   | Service Manual | Service Manual                       | Supplement                     | Service Manual |              | Service Manual | Service Manual | Safety                                  |
|---|----------------|----------------|--------------|--------------|--------------|----------------|--------------------------------------|--------------------------------|----------------|--------------|----------------|----------------|---|
| VCR   | 72010-518.80   | 72010-519.00   | 72010-519.01 | 72010-519.02 | 72010-519.03 | 72010-519.05   | <ul><li>● ● ● 72010-519.40</li></ul> | <ul><li>72010-519.41</li></ul> | 72010-519.45   | 72010-519.46 | 72010-520.90   | 72010-521.00   | 72010-800.00                            |
| GV 500 SV GV 500 SV/I GV 500 SV/I GV 500 GB GV 501 VPT GV 505 EURO GV 506 EURO GV 509 M GV 510 SV GV 511 GV 515 EURO GV 530 SV GV 530 SV/I GV 535 EURO GV 540 HIFI GV 540 NIC GV 540 HIFI GV 560 HIFI / LE GV 560 HIFI / LE GV 560 HIFI / S GV 560 SEURO GV 5000 GV 5000 GV 5000 GV 5000 GP GV 5000 SAA GV 5000 VPS | •              |                |              |              |              |                | •                                    | • • • •                        |                |              | •              |                | • • • • • • • • 72010-800.00            |
| GV 530 SV<br>GV 530 SV/1<br>GV 535 EURO<br>GV 540 GB<br>GV 540 HIFI<br>GV 540 NIC<br>GV 545 EURO<br>GV 560 HIFI<br>GV 560 HIFI  |                |                |              |              |              |                | •                                    | •                              | • • •          |              | •              | •              | • |
| GV 560 HIF1 / 5<br>GV 560 NIC<br>GV 565 EURO<br>GV 5000<br>GV 5000 EURO<br>GV 5000 GB<br>GV 5000 SAA<br>GV 5000 SV<br>GV 5000 VPS   |                | • • • •        | •            | •            |              | •              |                                      |                                | •              | •            |                | •              | • • • • • • •                           |
| GV 5000 VPS/5<br>GV 5002 VPS<br>GV 5003<br>GV 5008 SV<br>GV 5050<br>GV 5050 SV<br>GV 5050 SV/1<br>GV 5055 EURO  |                | •              | •            |              | •            |                | • • •                                | • • •                          |                |              | •              |                | • • • • • • •                           |
| GV 5095 SV<br>GV 5095 SV/1<br>GV 5300<br>GV 5300 VPS<br>GV 5300 VPS/5<br>GV 5305 EURO<br>GV 5395 SV/1<br>GV 5400 EURO   |                | •              | •            |              |              | •              | •                                    | •                              |                |              |                |                | • • • • • • •                           |
| GV 5400 HIFI<br>GV 5400 NIC<br>GV 5695 HIFI   |                |                |              |              |              |                |                                      |                                | •              | •            |                |                | •                                       |

|   | Service Manual | Supplement   | Supplement   | Service Manual | Supplement   | Service Manual | Safety       |
|---|----------------|--------------|--------------|----------------|--------------|----------------|--------------|
| VCR   | 72010-519.00   | 72010-519.01 | 72010-519.06 | 72010-519.40   | 72010-519.41 | 72010-519.45   | 72010-800.00 |
| KV 5001 VPS/5   | •              | •            | •            |                |              |                | •            |
| KV 5301 VPS/5<br>SE 5102 SV<br>SE 5104 SV<br>SE 5106 SV |                |              |              | •              | •            | •              | •            |

Video

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

### Service Manuals GV 6.. Series

|   | i              |              |                |                |              | ı              | ı              | ı            |                |                |                |                |                |                |                          |
|---|----------------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------|
|   | _              |              | F              | F              |              | _              | _              |              | F              | F              | F              | F              | F              | F              |                          |
|   | Service Manual | ţ            | Service Manual | Service Manual | +            | Service Manual | Service Manual |              | Service Manual |                          |
|   | Ma             | Supplement   | Ма             | Ма             | Supplement   | Ma             | Ma             | Supplement   | Ма             | Ма             | Ма             | Ма             | Ма             | Ма             |                          |
|   | g              | ler          | Se             | Se             | len          | g              | g              | len          | Se             | Se             | Se             | Se             | Se             | Se             | >                        |
|   | Ξ              | ddı          | Ņ              | Ņ              | ddı          | Ž              | Ž              | ddı          | Σį             | Σį             | Σį             | Σį             | Ņ              | Ņ              | Safety                   |
|   | Se             | Sſ           | Se             | Se             | าร           | Se             | Se             | જ            | Se             | Se             | Se             | Se             | Se             | Se             | Ss                       |
|   | _              |              | _              |                |              | _              |                |              | _              |                | _              |                | _              |                |                          |
|   | 00             | 04           | 10             | 25             | 26           | 30             | 35             | 36           | 40             | 45             | 20             | 45             | 20             | 95             |                          |
|   | 19             | 19           | 22             | 27             | 27           | 27             | 27             | 27           | 27             | 27             | 27             | 28             | 28             | 28             | 0.0                      |
|   | -5             | 9-           | 9-             | 9-             | 9-1          | 9-             | 9-             | 9-           | 9-             | 9-             | 9-             | 9-             | 9-             | 9-             | 80(                      |
|   | 10             | 110          | 110            | 110            | 110          | 110            | 110            | 110          | 110            | 110            | 110            | 110            | 110            | 110            | 10-                      |
| VCR GV 600 SV GV 600 SV/1 GVP 600 ICN EURO GV 605 EURO GV 609 M GV 630 SV GV 630 SV/1 GV 635 EURO GV 640 HIFI | 72010-519.00   | 72010-519.04 | 72010-522.10   | 72010-527.25   | 72010-527.26 | 72010-527.30   | 72010-527.35   | 72010-527.36 | 72010-527.40   | 72010-527.45   | 72010-527.50   | ●72010-528.45  | 72010-528.50   | 72010-528.95   | <b>6 6 7</b> 2010-800.00 |
| GV 600 SV   | -              | _            |                |                |              |                |                |              |                |                |                | •              |                |                | •                        |
| GV 600 SV/1   |                |              |                |                |              |                |                |              |                |                |                | •              |                |                |                          |
| GVP 600 ICN EURO  | •              | •            | •              |                |              |                |                |              |                |                |                |                |                |                | •                        |
| GV 605 EURO   |                |              |                |                |              |                |                |              |                |                |                |                | •              |                |                          |
| GV 609 M  |                |              | •              |                |              |                |                |              |                |                |                |                |                |                | •                        |
| GV 630 SV   |                |              |                |                |              |                |                |              |                |                |                | •              |                |                |                          |
| GV 630 SV/1   |                |              |                |                |              |                |                |              |                |                |                | •              |                |                | •                        |
| GV 635 EURO   |                |              |                |                |              |                |                |              |                |                |                |                | •              |                |                          |
| GV 640 HIFT   |                |              |                |                |              |                | •              |              |                |                |                |                |                |                |                          |
| GV 640 NIC<br>GV 645 EURO   |                |              |                |                |              |                |                |              |                |                | •              |                |                |                |                          |
| GV 645 EURO   |                |              |                |                |              |                | •              |              |                |                | _              |                |                |                | •                        |
| GV 650 HIFI<br>GV 660 HIFI  |                |              |                |                |              |                | •              |              |                |                |                |                |                |                | •                        |
| GV 660 NIC  |                |              |                |                |              |                | •              |              |                |                |                |                |                |                |                          |
| GV 660 NIC<br>GV 665 EURO   |                |              |                |                |              |                |                |              |                |                | •              |                |                |                | •                        |
| GV 670 S HIFI   |                |              |                |                |              |                | •              | •            |                |                |                |                |                |                |                          |
| GV 670 S HIFI<br>GV 670 S NIC<br>GV 690 S HIFI<br>GV 690 S NIC  |                |              |                |                |              |                | •              | •            |                |                |                |                |                |                | •                        |
| GV 690 S HIFI   |                |              |                |                |              |                | •              | •            |                |                |                |                |                |                |                          |
| GV 690 S NIC  |                |              |                |                |              |                | •              | •            |                |                |                |                |                |                | •                        |
| GV 6000 EURO  |                |              |                |                |              |                |                |              | •              |                |                |                |                |                |                          |
| GV 690 S NIC<br>GV 6000 EURO<br>GV 6000 SV<br>GV 6000 SV/1<br>GV 6001 V+<br>GV 6066<br>GV 6096 SV             |                |              |                | •              |              |                |                |              |                |                |                |                |                |                | •                        |
| GV 6000 SV/1  |                |              |                |                |              |                |                |              |                |                |                |                |                |                |                          |
| GV 6001 V+  |                |              |                | •              |              |                |                |              |                |                |                |                |                |                |                          |
| GV 6006 SV  |                |              |                | •              | •            |                |                |              |                |                |                |                |                |                |                          |
| GV 6096 SV/1  |                |              |                | •              | •            |                |                |              |                |                |                |                |                |                |                          |
| GV 6300 EURO  |                |              |                |                |              |                |                |              | •              |                |                |                |                |                | •                        |
| GV 6300 SV  |                |              |                | •              |              |                |                |              |                |                |                |                |                |                |                          |
| GV 6300 SV/1  |                |              |                | •              |              |                |                |              |                |                |                |                |                |                | •                        |
| GV 6396 SV  |                |              |                | •              | •            |                |                |              |                |                |                |                |                |                |                          |
| GV 6400 EURO  |                |              |                |                |              |                |                |              |                | •              |                |                |                |                | •                        |
| GV 6400 HIFI  |                |              |                |                |              | •              |                |              |                |                |                |                |                |                |                          |
| GV 6400 HIFI/5  |                |              |                |                |              | •              |                |              |                |                |                |                |                |                |                          |
| GV 6400 NIC 1<br>GV 6400 NIC 2  |                |              |                |                |              | •              |                |              |                |                |                |                |                |                |                          |
| GV 6400 NIC 2   |                |              |                |                |              | •              |                |              |                |                |                |                |                |                |                          |
| GV 6596 HIFI  |                |              |                |                |              |                | •              |              |                |                |                |                |                |                | •                        |
| GV 6596 NIC   |                |              |                |                |              |                | •              |              |                |                |                |                |                |                |                          |
|   |                |              |                |                |              |                |                |              |                |                |                |                |                |                |                          |
| MV 6001 SV  |                |              |                |                |              |                |                |              |                |                |                |                |                | •              |                          |
| SE 6102 SV  | l              |              | 1              | •              | •            | l              | l              | l            | 1              | 1              | 1              | 1              | 1              | 1              | •                        |
| SE 6104 SV  |                |              |                | •              | •            |                |                |              |                |                |                |                |                |                | •                        |
| SE 6106 HIFI  |                |              |                |                |              |                | •              |              |                |                |                |                |                |                | •                        |
|   |                |              |                |                |              |                |                |              |                |                |                |                |                |                |                          |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

Grundig Service 3.19

### Service Manuals GV 7.. Series

|                              | lal            |              |              | lal           | Ī            | lal            | lal            | lal            | ing (D)              | ing (GB)              | ing (D)                        | ing (GB)                       |                                |
|------------------------------|----------------|--------------|--------------|---------------|--------------|----------------|----------------|----------------|----------------------|-----------------------|--------------------------------|--------------------------------|--------------------------------|
|                              | Service Manual | Supplement   | Supplement   | Service Manua | Supplement   | Service Manual | Service Manual | Service Manual | Service Training (D) | Service Training (GB) | Service Training (D)           | Service Training (GB)          | Safety                         |
| VCR                          | 72010-527.25   | 72010-527.26 | 72010-527.27 | 72010-527.35  | 72010-527.37 | 72010-527.55   | ●72010-530.25  | 72010-530.30   | 72010-528.93         | 72010-528.94          | <ul><li>72010-531.40</li></ul> | <ul><li>72010-531.41</li></ul> | <ul><li>72010-800.00</li></ul> |
| GV 27                        | -              | -            | -            |               |              |                | •              | -              | -                    | -                     | •                              | •                              | •                              |
| GV 27 EURO                   |                |              |              |               |              |                |                | •              |                      |                       | •                              | •                              |                                |
| GV 27 VPS/5                  |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 47                        |                |              |              |               |              |                | •              |                |                      |                       | • • •                          | •                              | •                              |
| GV 47 VPS/5                  |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7000 EURO                 |                |              |              |               |              |                |                | •              |                      |                       |                                | •                              | •                              |
| GV 7000 SV                   |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7000 SV-C                 |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| GV 7003                      |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              |                                |
| GV 709 M<br>GV 729 M         |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| GV 7300 EURO                 |                |              |              |               |              |                |                |                |                      |                       |                                |                                | •                              |
|                              |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| GV 7300 SV<br>GV 7300 SV/5   |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              |                                |
| GV 740 HiFi                  |                |              |              | •             | •            |                |                |                | •                    | •                     |                                |                                | •                              |
| GV 740 NIC                   |                |              |              | •             | •            |                |                |                | •                    | •                     |                                |                                | •                              |
| GV 7400 EURO                 |                |              |              |               |              |                |                | •              |                      | _                     | •                              | •                              | •                              |
| GV 7400 HiFi                 |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7400 HiFi/5               |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7400 NIC                  |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7400 NIC2                 |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| GV 7497 NIC                  |                |              |              | •             | •            |                |                |                | •                    | •                     |                                |                                |                                |
|                              |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| KV 7001 VPS/5                |                |              |              |               |              |                | •              |                |                      |                       | •                              | •                              | •                              |
| KV 7301 VPS/5                |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| <b>-</b>                     | 1              | i            | i            | ı             | ı            | ı              |                | ı              |                      |                       |                                |                                |                                |
| SE 7100 SV                   |                |              |              |               |              |                |                |                |                      |                       | •                              | •                              | -                              |
| SE 7104                      |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| SE 7105 HiFi<br>SE 7106 HiFi |                |              |              |               |              |                |                |                |                      |                       |                                |                                |                                |
| SE / IUO MIFI                |                |              |              |               |              |                |                |                | _                    | _                     |                                |                                |                                |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

# **Service Manuals TVR Combinations**

|                            | Service Manual | Supplement   | Supplement   | Service Manual | Service Manual | Supplement   | Service Manual | Supplement   | Supplement   | Supplement   | Service Manual | Supplement   | Supplement   | Safety           |
|----------------------------|----------------|--------------|--------------|----------------|----------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|------------------|
| Type of TVR                | 72010-003.00   | 72010-003.01 | 72010-003.02 | 72010-017.05   | 72010-517.30   | 72010-517.31 | 72010-524.95   | 72010-524.96 | 72010-524.97 | 72010-524.98 | 72010-525.00   | 72010-525.01 | 72010-525.02 | • • 72010-800.00 |
| Type of TVR<br>TVR 3700    |                | -            | -            | -              | •              | _            |                | - 1          | -            | -            | -              |              | -            | •                |
| TVR 3700 FR                |                |              |              | •              |                |              |                |              |              |              |                |              |              |                  |
| TVR 3700 GB                |                |              |              |                | •              | •            |                |              |              |              |                |              |              | •                |
| TVR 3701 SV                |                |              |              |                |                |              | •              | •            |              | •            |                |              |              |                  |
| TVR 3701 SV/FR<br>TVR 3705 |                |              |              |                |                |              |                |              |              |              | •              | •            | •            | •                |
| TVR 3705                   |                |              |              |                |                |              | •              |              |              | •            |                |              |              |                  |
| TVR 3705 FR                |                |              |              |                |                |              |                |              |              |              | •              |              | •            | •                |
| TVR 3710                   |                |              |              |                |                |              | •              |              |              |              |                |              |              |                  |
| TVR 3710 FR                |                |              |              |                |                |              |                |              |              |              | •              |              | •            | •                |
| TVR 3710 GB                |                |              |              |                |                |              | •              |              |              | •            |                |              |              |                  |
| TVR 3720                   |                |              |              |                |                |              | •              |              |              | •            |                |              |              | •                |
| TVR 3720 GB                |                |              |              |                |                |              |                |              |              |              |                |              |              |                  |
| TVR 4500 CTI/Text          | •              | •            |              |                |                |              |                |              |              |              |                |              |              | •                |
| TVR 4500 GB                | •              | •            |              |                |                |              |                |              |              |              |                |              |              |                  |
| TVR 4510                   | •              | •            | •            |                |                |              |                |              |              |              |                |              |              | •                |
| TVR 5100                   |                |              |              |                |                |              | •              |              |              |              |                |              |              |                  |
| TVR 5100 FR                |                |              |              |                |                |              |                |              |              |              | •              |              | •            | •                |
| TVR 5100 GB                |                |              |              |                |                |              | •              |              |              |              |                |              |              |                  |
| TVR 5120 FR                |                |              |              |                |                |              |                |              |              |              | •              |              | •            | •                |
| TVR 5500                   |                |              |              |                |                |              | •              |              |              | •            |                |              |              |                  |
| TVR 5500 FR                |                |              |              |                |                |              |                |              |              |              | •              |              | •            | •                |
| TVR 5510                   |                |              |              |                |                |              |                |              |              |              |                |              |              |                  |

Video

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

# **GRUNDIG Tele-Pilot®Remote Control Handsets/Survey of Types** Video Product Range



RP 10 75988-000.10 RP 10 Minerva 75988-000.12 RT 130 75988-000.14



RP 13 75988-000.11 RP 13 Minerva 75988-000.13 RT 230 75988-000.15



RP 20 27520-159.01



RP 25 27520-158.01



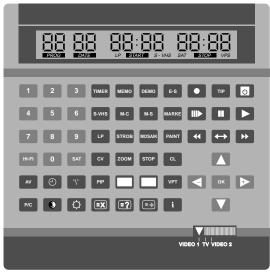
RP 30 27520-160.01



RP 33 27520-171.01



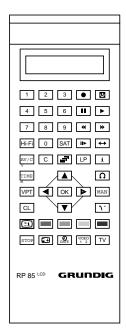
RP 35 27520-161.01



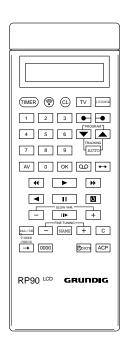




RP 81 27520-156.01



RP 85 27520-152.01



RP 90 27520-154.01



RP 95 27520-155.01



RP 150 75988-324.03



RP 160 75988-010.91



RP 409 75981-307.28



RP 509 75988-232.31 RP 609 75988-034.00



RP 469 75981-317.91



RP 500 75988-010.71



RP 540 75988-010.73



RP 709/729 75988-323.31



RT 750/131 75988-035.07



RT 151 75988-033.22



TVP 762 75988-017.06



RP 7 72011-650.00



Video Control 1 72011-610.00

Video Control 1 72011-610.00

replaces the following types:

| Type   | Code |
|--------|------|
| RP 4   | 205  |
| RP 6   | 201  |
| RC 6   | 201  |
| RP 50  | 205  |
| VP 386 | 202  |
| VP 615 | 206  |
| RC 615 | 206  |
|        |      |

and variant versions

Video

### Video Remote Control Codes Video 2000 to VS 960

| VCR        | VCF   | Rem          | ote Co    | ontrol (      | Code          | RC Transmitter | Т     | ransm        | itter R   | C Cod         | le            |
|------------|-------|--------------|-----------|---------------|---------------|----------------|-------|--------------|-----------|---------------|---------------|
|            | 7 Bit | 10Bit old 3) | 10Bit new | 16Bit Level 1 | 16Bit Level 2 |                | 7 Bit | 10Bit old 3) | 10Bit new | 16Bit Level 1 | 16Bit Level 2 |
| Video 2000 | •     | -            | -         | -             | -             | TPV 355        | •     | -            | -         | -             | -             |
| Video 2000 | •     | _            | _         | _             | -             | TPV 385        | •     | _            | _         | _             | -             |
| VS 200 RC  | •     | 1)           | -         | -             | -             | VTP 386        | •     | -            | -         | -             | -             |
| VS 300     | •     | Ó            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 310     | •     | •            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 320     | •     | •            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 320     | •     | •            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 340     | •     | •            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 380     | •     | •            | -         | -             | -             | VP 615         | •     | -            | -         | -             | -             |
| VS 400     | -     | -            | •         | -             | -             | RP 4           | -     | -            | •         | -             | -             |
| VS 410     | -     | -            | •         | -             | -             | RP 4           | -     | -            | •         | -             | -             |
| VS 440     | -     | -            | •         | -             | -             | RP 4           | -     | -            | •         | -             | -             |
| VS 450     | -     | -            | •         | -             | -             | RP 6           | -     | -            | •         | -             | -             |
| VS 460     | -     | -            | •         | -             | -             | RP 5 LCD       | -     | -            | •         | -             | -             |
| VS 500     | -     | -            | •         | -             | -             | RP 50          | -     | -            | •         | -             | -             |
| VS 505     | -     | -            | •         | -             | -             | RP 65 LCD      | -     | -            | •         | -             | -             |
| VS 510     | -     | -            | •         | -             | -             | RP 65 LCD      | -     | -            | •         | -             | -             |
| VS 520     | -     | -            | •         | -             | -             | RP 6           | -     | -            | •         | -             | -             |
| VS 530     | -     | -            | •         | -             | -             | RP 6 LCD       | -     | -            | •         | -             | -             |
| VS 540     | -     | -            | •         | -             | -             | RP 6 LCD       | -     | -            | •         | -             | -             |
| VS 550     | -     | -            | •         | -             | -             | RP 70 LCD      | -     | -            | •         | -             | -             |
| VS 600     | -     | -            | •         | •             | •             | RP 60 LCD      | -     | -            | -         | •             | -             |
| VS 610     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 620     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 626     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 630     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 640     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 650     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 660     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 680     | -     | -            | •         | •             | •             | RP 80 LCD 2)   | -     | -            | •         | •             | •             |
| VS 700     | -     | -            | •         | •             | •             | RP 60 LCD      | -     | -            | -         | •             | -             |
| VS 710     | -     | -            | •         | •             | •             | RP 60 LCD      | -     | -            | -         | •             | -             |
| VS 720     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 740     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 790     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 800     | -     | -            | •         | •             | •             | RP 60 LCD      | -     | -            | -         | •             | -             |
| VS 810     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 900     | -     | -            | •         | •             | •             | RP 90 LCD      | -     | -            | •         | •             | •             |
| VS 901     | -     | -            | •         | •             | •             | RP 95 LCD      | -     | -            | •         | •             | •             |
| VS 910     | -     | -            | •         | •             | •             | RP 90 LCD      | -     | -            | •         | •             | •             |
| VS 920     | -     | -            | •         | •             | •             | RP 95 LCD      | -     | -            | •         | •             | •             |
| VS 930     | -     | -            | •         | •             | •             | RP 75 LCD      | -     | -            | •         | •             | •             |
| VS 940     | -     | -            | •         | •             | •             | RP 95 LCD      | -     | -            | •         | •             | •             |
| VS 960     | -     | -            | •         | •             | •             | RP 85 LCD      | -     | -            | •         | •             | •             |

Video

3.26 Grundig Service

<sup>1)</sup> With VIF-E 30a it is possible to receive the old 10Bit-code in addition to the 7Bit-code.

<sup>2)</sup> Change between RC levels with the slide switch.

<sup>3)</sup> The old 10Bit-code is exclusively used by earlier RC transmitters with control possibility for video recorders. It is not compatible with the new 10Bit-code.

### **Video Remote Control Codes GV 200 to GV 470**

| Type of VCR                | VCR I    | RC Co     | de<br>        |              | RC Transmitter | Trans    | mitter   | RC C         | ode          |
|----------------------------|----------|-----------|---------------|--------------|----------------|----------|----------|--------------|--------------|
|                            | C 5 Code | 10Bit new | 16Bit Level 1 | 6Bit Level 2 |                | C 5 Code | OBit new | 6Bit Level 1 | 6Bit Level 2 |
| C) / 200                   | ~        |           |               | -            | DD 20          | 22       | _        | _            | _            |
| GV 200<br>GV 201           | -        | •         | •             | •            | RP 20<br>RP 25 | -        | -        | •            | •            |
| GV 201-1                   | •        | -         | -             | -            | RP 150         | •        | -        | -            | -            |
| GV 210                     | -        | •         | •             | •            | RP 20          | -        | -        | •            | •            |
| GV 211                     | -        | •         | •             | •            | RP 20          | -        | -        | •            | •            |
| GV 220                     | -        | •         | •             | •            | RP 25          | -        | -        | •            | •            |
| GV 230                     | -        | •         | •             | •            | RP 25          | -        | -        | •            | •            |
| GV 240                     | -        | •         | •             | •            | RP 25          | -        | -        | •            | •            |
| GV 250                     | -        | •         | •             | •            | RP 25          | -        | -        | •            | •            |
| GV 280S<br>GV 400          | -        | -         | _             | -            | RP 81<br>RP 10 | -        | -        | _            | -            |
| GV 400 GB                  |          | _         | _             | _            | RP 13          |          | _        | _            | _            |
| GV 400 EAST                | •        | -         | -             | -            | RT 130         | •        | -        | -            | -            |
| GV 400 VPS                 | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 401 VPT                 | -        | -         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 402                     | •        | -         | -             | -            | RT 13          | •        | -        | -            | -            |
| GV 404 SV                  | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 405 EURO<br>GV 406 EURO | -        | -         | •             | •            | RP 30<br>RP 33 | -        | -        | •            | •            |
| GV 409 M                   | -        | -         |               |              | RP 409         | -        | -        | •            | •            |
| GV 410                     | •        | -         | _             | -            | RP 10          | •        | -        | _            | _            |
| GV 410 VPS                 | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 411                     | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 411 EAST                | •        | -         | -             | -            | RT 230         | •        | -        | -            | -            |
| GV 411-1                   | •        | -         | -             | -            | RT 750/131     | •        | -        | -            | -            |
| GV 411-2                   | •        | -         | -             | -            | RT 151         | •        | -        | -            | -            |
| GV 412                     | •        | -         | -             | -            | RP 13<br>RP 30 | •        | -        | -            | -            |
| GV 414 SV<br>GV 415 EURO   | -        | -         |               |              | RP 30          | -        | -        |              |              |
| GV 416 EURO                | _        | _         | •             |              | RP 33          | _        | _        | •            | •            |
| GV 420 VPT                 | -        | -         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 430                     | •        | -         | -             | -            | RP 13          | •        | -        | -            | -            |
| GV 430 GB                  | •        | -         | -             | -            | RP 13          | •        | -        | -            | -            |
| GV 430 VPS                 | -        | -         | •             | •            | RP 33          | -        | -        | •            | •            |
| GV 434 SV                  | -        | -         | •             | •            | RP 33<br>RP 33 | -        | -        | •            | •            |
| GV 435 EURO<br>GV 440 NIC  | -        | -         |               |              | RP 30          | -        | -        |              |              |
| GV 440 VPS                 | _        | •         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 450                     | -        | •         | •             | •            | RP 33          | -        | -        | •            | •            |
| GV 450 GB                  | -        | •         | •             | •            | RP 33          | -        | -        | •            | •            |
| GV 450 NIC                 | -        | •         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 450 VPT                 | -        | •         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 460 NIC<br>GV 460 VPT   | -        | •         | •             | •            | RP 35<br>RP 35 | -        | -        | •            | •            |
| GV 464 HiFi                | -        |           |               |              | RP 35          | -        | -        |              |              |
| GV 464 NIC                 | -        | •         | •             | •            | RP 35          | -        | _        | •            | •            |
| GV 465 EURO                | -        | •         | •             | •            | RP 33          | -        | -        | •            | •            |
| GV 469 M                   | -        | -         | -             | -            | RP 469         | -        | -        | -            | -            |
| GV 470 PC                  | -        | •         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 470 S VPT               | -        | •         |               |              | RP 35          | -        | -        | •            |              |
| GV 4000 VPS                |          | l _       | l _           | 1 _ 1        | RP 10          |          | ۱ _      | l _          | 1 _ 1        |
| GV 4010 SV-VPT             | -        | _         | •             | •            | RP 35          | -        | _        | •            | •            |
| GV 4092 SV                 | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 4092 VPS                | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 4192 SV                 | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| GV 4292 VPT                | -        | -         | •             | •            | RP 35          | -        | -        | •            | •            |
| GV 4592 (SV)VPT            | -        | •         | •             | •            | RP 35          | -        | -        | •            | •            |
| MV 4005                    | •        | _         | -             | -            | RP 10 Minerva  | •        | _        | -            | -            |
| MV 4105                    | •        | -         | -             | -            | RP13 Minerva   | •        | -        | -            | -            |
|                            |          |           |               | ,            |                |          |          |              |              |
| SE 4100 VPS                | -        | -         | •             | •            | RP 30          | -        | -        | •            | •            |
| SE 4104 SV<br>SE 4120 SV   | -        | -         |               |              | RP 30<br>RP 35 | -        | -        |              |              |
| OL 7120 OV                 |          | _         | '             | . •          | II 131 33      | ı -      | _        | '            | · • 1        |

# **Video Remote Control Codes GV 500 to GV 560**

| Q  | Type of VCR     | Ī   | Ī    |      | RC Transmitter |     | ·    |      |
|--|-----------------|-----|------|------|----------------|-----|------|------|
| Section   Sec    |                 |     | _    | 2    |                |     | _    | 7    |
| GV 25 SV /5  |                 | ode | vel  |      |                | apo | vel  |      |
| GV 25 SV /5 GV 45 SV /5 GV 45 SV /5 GV 500 SV GV   |                 | Ö   | . Fe | . Le |                | Ö   | . Fe | Le l |
| GV 25 SV /5 GV 45 SV /5 GV 45 SV /5 GV 500 SV GV   |                 | C 5 | 6Bit | 6Bit |                | C 5 | 6Bit | 6Bit |
| GV 500 GB GV 500 SV GV 500 SU GV 500 | GV 25 SV /5     |     |      |      | RP 150         |     |      |      |
| GV 500 GB  |                 | _   |      |      |                | _   |      | -    |
| GV 500 SV /1 GV 501 VPT GV 501 VPT GV 505 EURO GV 505 EURO GV 505 EURO GV 509 M GV 509 M GV 509 M GV 511 GV 511 GV 515 EURO GV 503 SV GV 511 GV 515 EURO GV 503 SV GV 516 EURO GV 503 SV GV 516 EURO GV 503 SV GV 517 GV 503 SV GV 518 EURO GV 503 SV II GV 504 GB GV 505  |                 | -   | •    | •    | RP 500         | -   | •    | •    |
| GV 505 EURO GV 505 EURO GV 506 EURO GV 506 EURO GV 509 M GV 510 SV GV 510 SV GV 511 GV 515 EURO GV 530 SV GV 530 SV GV 530 SV GV 530 SV GV 535 EURO GV 530 SV GV 535 EURO GV 540 HiFi GV 560 NiC GV 530 SV GV 5000 SAA GV 5000 SAA GV 5000 SAA GV 5000 SV GV 5 |                 | -   | _    | _    |                | -   | •    | •    |
| GV 505 EURO GV 506 EURO GV 509 M GV 510 SV GV 511 GV 515 EURO GV 530 SV GV 511 GV 530 SV GV 530 SV GV 530 SV GV 530 SV GV 540 GB GV 540 GB GV 540 GB GV 540 HiFi GV 540 HiFi GV 545 EURO GV 545 EURO GV 545 EURO GV 546 GB GV 540 NIC GV 545 EURO GV 546 GHIFi GV 560 HiFi GV 560 HiFi GV 560 HiFi GV 560 HiFi GV 560 NIC GV 56 |                 | -   | _    |      |                | -   |      | _    |
| GV 506 EURO GV 509 M GV 510 SV GV 511 GV 515 EURO GV 530 SV GV 540 GB GV 540 GB GV 540 HiFi GV 540 NIC GV 540 NIC GV 540 NIC GV 540 NIFi GV 550 HiFi GV 560 NIC GV 560 SW GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 SW GV |                 | -   | _    | _    |                | -   | •    | _    |
| GV 510 SV  |                 | -   | •    | •    |                | -   | •    | •    |
| GV 511   |                 | -   | -    | -    |                | -   | -    | -    |
| GV 515 EURO GV 530 SV GV 530 SV GV 530 SV GV 530 SV GV 535 EURO GV 535 EURO GV 540 GB GV 540 HiFi GV 540 NIC GV 546 EURO GV 546 EURO GV 546 EURO GV 546 EURO GV 560 HiFi GV 560 HiFi GV 560 NIC GV 560 HiFi GV 560 NIC GV 5000 FV 5000  |                 | -   | •    | _    |                | -   | •    | •    |
| GV 530 SV  |                 | -   |      | _    |                | -   |      |      |
| GV 530 SV /1 GV 535 EURO GV 540 GB GV 540 HIFI GV 540 NIC GV 545 EURO GV 540 HIFI GV 560 HIFI GV 560 HIFI GV 560 HIFI GV 560 NIC GV 560 HIFI /5 GV 560 HIFI /5 GV 560 HIFI GV 560 NIC GV 56 |                 | -   |      | _    |                | -   | •    | •    |
| GV 540 GB GV 540 HIFI GV 540 NIC GV 540 NIC GV 540 NIC GV 540 HIFI GV 560 HIFI |                 | -   | •    | •    |                | -   | •    | •    |
| GV 540 HiFi GV 540 NIC GV 545 EURO GV 545 EURO GV 560 HiFi GV 560 HiFi GV 560 HiFi /5 GV 5000 C   |                 | -   | •    | •    |                | -   | •    | •    |
| GV 540 NIC GV 545 EURO GV 560 HiFi GV 560 HiFi GV 560 HiFi /5 GV 560 HiFi /5 GV 560 NIC GV 5000 NIC GV 500 |                 | -   |      |      |                | -   |      |      |
| GV 545 EURO GV 560 HiFi GV 560 NIC GV 565 EURO GV 565 EURO GV 5000 GR GV 5000 GR GV 5000 GR GV 5000 SAA GV 5000 SV GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 SV GV 5000 SV GV 5000 SV GV 5000 SV GV 5000 FR GV 500 |                 | -   |      |      |                | -   |      |      |
| GV 560 HiFi /5 GV 560 HiFi LE GV 560 NIC GV 565 EURO GV 565 EURO GV 5000 EURO GV 5000 EURO GV 5000 SAA GV 5000 SV GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 SV GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 SV G |                 | -   | •    | •    |                | -   | •    | •    |
| GV 560HiFi LE GV 560 NIC GV 565 EURO  GV 5000 GV 5000 EURO GV 5000 GB GV 5000 SAA GV 5000 SV GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 VPS GV 5000 SV GV 5000 VPS GV |                 | -   | •    | •    |                | -   | •    | •    |
| GV 560 NIC GV 565 EURO  -  |                 | -   | •    | •    |                | -   | •    | •    |
| GV 5000 GV 5000 EURO GV 5000 EURO GV 5000 GB GV 5000 SAA GV 5000 SV GV 5000 SV GV 5000 VPS GV 5000 SV GV 5050 SV GV 5 |                 | -   | •    | •    |                | -   | •    | •    |
| GV 5000 EURO GV 5000 EURO GV 5000 GB GV 5000 SAA GV 5000 SV GV 5000 SV GV 5000 VPS GV 5050 V GV 5050 V GV 5050 V GV 5050 SV GV 5050 SV GV 5055 EURO GV 5095 SV |                 | -   |      |      |                | -   |      |      |
| GV 5000 EURO GV 5000 GB GV 5000 GB GV 5000 SAA GV 5000 SV GV 5000 VPS GV 5000  |                 | ı   | _    |      |                | l   |      | , -  |
| GV 5000 GB GV 5000 SAA GV 5000 SV GV 5000 SV GV 5000 VPS GV 5000 PS GV 5050 SV FV F F 500 FV 5055 EURO GV 5095 SV FV F F 500 FV 5000 PS GV 5000 PS GV 5000 PS FV F 500 FV F F 500 FV F F 500 FV F F 500 FV F F F F F 500 FV F F F F F 500 FV F F F F 500 FV F F F F F F F F F F F F F F F F F F  |                 | •   | -    | -    |                | -   | -    | -    |
| GV 5000 SAA GV 5000 SV GV 5000 SV GV 5000 VPS GV 5000 VPS GV 5000 VPS  |                 |     | -    |      |                | _   | -    | -    |
| GV 5000 SV GV 5000 VPS GV 5002 VPS GV 5003 GV 5008 SV GV 5050 SV GV 5050 SV GV 5050 SV GV 5055 EURO GV 5055 EURO GV 5095 SV GV  |                 |     | -    | -    |                | _   | -    | -    |
| GV 5000 VPS /5  GV 5002 VPS  GV 5003  GV 5008 SV  GV 5050  GV 5050 SV  GV 5050 SV /1  GV 5055 EURO  GV 5095 SV  GV 5090 SV  GV 5095 HiFi  GV 5400 NIC  GV 5695 HiFi  GV 5001 VPS /5  FV 5000 -  GV 5000  |                 | -   | -    | -    |                | •   | -    | -    |
| GV 5002 VPS GV 5003 GV 5008 SV GV 5050 SV GV 5055 EURO GV 5055 EURO GV 5095 SV GV 5095 FB GV 5000 F |                 | •   | -    | -    |                | •   | -    | -    |
| GV 5003 GV 5008 SV GV 5050 GV 5050 GV 5050 SV GV 5050 SV GV 5050 SV GV 5050 SV /1 GV 5055 EURO GV 5095 SV GV 5095 SV GV 5095 SV GV 5300 GV 5300 GV 5300 VPS GV 5300 VPS GV 5305 EURO GV 5305 EURO GV 5305 EURO GV 5305 EURO GV 5095 SV /1 GV 5095 BURO G |                 | •   | -    | -    |                | •   | -    | -    |
| GV 5008 SV   |                 |     | -    | -    |                |     | -    | -    |
| GV 5050 SV -   |                 | •   | -    | -    |                | •   | -    | _    |
| GV 5050 SV /1 GV 5055 EURO GV 5095 SV GV 5095 SV GV 5095 SV /1 GV 5300 GV 5300 FR 500 GV 5300 VPS GV 5300 VPS GV 5300 VPS /5 GV 5305 EURO GV 5305 EURO GV 5305 EURO GV 5305 EURO GV 5395 SV FR 500 GV 5400 EURO GV 5400 FURO GV 5400 NIC GV 5400 NIC GV 5695 HiFi FR 540 FR 54 |                 | -   | •    | •    |                | -   | •    | •    |
| GV 5055 EURO GV 5095 SV GV 5095 SV -   |                 | -   | •    | •    |                | -   | •    | •    |
| GV 5095 SV -   |                 | -   | -    | _    |                | -   | _    | •    |
| GV 5095 SV /1  GV 5300  GV 5300 VPS  GV 5300 VPS  GV 5300 VPS /5  GV 5305 EURO  GV 5395 SV  GV 5395 SV  GV 5400 EURO  GV 5400 HiFi  GV 5400 NIC  GV 5695 HiFi   FR 540  FR 540 |                 | -   |      |      |                | -   | _    |      |
| GV 5300  |                 |     | _    |      |                | -   | _    | •    |
| GV 5300 VPS /5 GV 5305 EURO GV 5395 SV GV 5395 SV /1 GV 5400 EURO GV 5400 HiFi GV 5400 NIC GV 5695 HiFi  KV 5001 VPS /5 KV 5301 VPS /5 SE 5102 SV SE 5104 SV   |                 | •   | -    | -    |                | •   | -    | -    |
| GV 5305 EURO GV 5395 SV GV 5395 SV -   |                 | •   | -    | -    |                | •   | -    | -    |
| GV 5395 SV -   |                 |     | -    |      |                | _   | -    | -    |
| GV 5395 SV /1  |                 | _   | -    | -    |                | -   | •    | -    |
| GV 5400 EURO -   |                 | -   | _    |      |                | -   | _    | -    |
| GV 5400 NIC GV 5695 HiFi  -  -  -  -  -  -  -  -  -  -  -  -  -  |                 | -   | •    | •    | RP 500         | -   | •    | •    |
| GV 5695 HiFi       -       -       •       RP 540       -       •       •         KV 5001 VPS /5       •       -       -       RP 150       •       -       -         KV 5301 VPS /5       •       -       -       RP 150       •       -       -         SE 5102 SV       -       •       •       RP 500       -       •       •         SE 5104 SV       -       •       •       RP 500       -       •       •  |                 | -   | _    | -    |                | -   | _    |      |
| KV 5001 VPS /5   |                 | -   |      |      |                | -   |      |      |
| KV 5301 VPS /5       •       -       -       RP 150       •       -       -         SE 5102 SV       -       •       •       RP 500       -       •       •         SE 5104 SV       -       •       •       RP 500       -       •       •  | O 7 0000 FIII F | •   |      |      | 10 040         | •   |      |      |
| SE 5102 SV   |                 | •   | -    | -    |                | •   | -    | -    |
| SE 5104 SV - ● ■ RP 500 - ●  | KV 5301 VPS /5  | •   | -    | -    | RP 150         | •   | -    | -    |
| SE 5104 SV - ● ■ RP 500 - ●  | SF 5102 SV      | ۱ ـ | •    |      | RP 500         | _   | •    | •    |
|  |                 | -   | •    | •    |                | -   | •    | •    |
|  | SE 5106 HiFi    | -   | •    | •    |                | -   | •    | •    |

Video

3.28 Grundig Service

# **Video Remote Control Codes GV 600 to GV 690**

| Type of VCR                 |      |             |             | RC Transmitter   |        |             |             |
|-----------------------------|------|-------------|-------------|------------------|--------|-------------|-------------|
|                             | Code | vel 1       | vel 2       |                  | Code   | vel 1       | vel 2       |
|                             | 5 Cc | 16Bit Level | 16Bit Level |                  | 5<br>5 | 16Bit Level | 16Bit Level |
|                             | RC & | l6Bi        | l6Bi        |                  | RC 8   | l6Bi        | l6Bi        |
| GV 26                       | •    | -           | -           | RP 160           | •      | -           | -           |
| GV 26 EURO                  | •    | -           | -           | RP 160 F         | •      | -           | -           |
| GV 26 VPS                   | •    | -           | -           | RP 160           | •      | -           | -           |
| GV 46                       | •    | -           | -           | RP 160           | •      | -           | -           |
| GV 46 VPS                   | •    | -           | -           | RP 160           | •      | -           | -           |
| GV 600 SV                   | -    | •           | •           | RP 500           | -      | •           | •           |
| GV 600 SV/1                 | -    | •           | •           | RP 500           | -      | •           | •           |
| GVP 600 ICN EURO            | •    | -           | -           | RP 150           | •      | -           | -           |
| GV 605 EURO                 | -    | •           | •           | RP 500 F         | -      | •           | •           |
| GV 609 M                    | -    | -           | -           | RP 609M          | -      | -           | -           |
| GV 630 SV                   | -    | •           | •           | RP 500           | -      | •           | •           |
| GV 630 SV/1                 | -    | •           | •           | RP 500           | -      | •           |             |
| GV 635 EURO                 | -    | •           | •           | RP 500 F         | -      | •           | •           |
| GV 640 HiFi                 | -    | •           | •           | RP 500           | -      | •           |             |
| GV 640 NIC                  | -    | •           | •           | RP 500           | -      | •           | •           |
| GV 645 EURO                 | -    | •           | •           | RP 500 F         | -      | •           | •           |
| GV 650 HiFi                 | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 660 HiFi                 | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 660 NIC                  | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 665 EURO                 | -    | •           | •           | RP 540 F         | -      | •           |             |
| GV 670 S HiFi               | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 670 S NIC                | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 690 S HiFi               | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 690 S NIC                | -    | •           | •           | RP 540           | -      | •           | •           |
| GV 6000 EURO                | •    | l _         | _           | RP 160 F         | •      | _           | - 1         |
| GV 6000 EURO                | •    | -           | -           | RP 160           | •      | -           | _           |
| GV 6000 SV/1                | •    | _           | _           | RP 160           | •      | _           | _           |
| GV 6000 V+                  | •    | _           | -           | RP 160           | •      | _           | -           |
| GV 6066                     | •    | _           | _           | RP 160           | •      | _           | -           |
| GV 6096 SV                  | -    | •           | •           | RP 500           | -      | •           | •           |
| GV 6096 SV/1                | _    | •           | •           | RP 500           | -      |             |             |
| GV 6300 EURO                | -    | •           | •           | RP 500 F         |        | •           |             |
| GV 6300 EURO                | _    | •           | •           | RP 500           | -      |             |             |
| GV 6300 SV/1                |      | •           | •           | RP 500           | _      | •           | •           |
| GV 6396 VPT                 |      |             |             | RP 540           |        |             |             |
| GV 6400 EURO                | -    | -           | -           | RP 160 F         | •      |             | -           |
| GV 6400 HiFi                | •    | _           | -           | RP 160           | •      | _           | _           |
| GV 6400 HiFi/5              | •    | _           | _           | RP 160           | •      | _           | _           |
| GV 6400 NIC                 |      | _           | _           | RP 160           | •      |             | _           |
| GV 6400 NIC<br>GV 6401 NIC  | •    | _           |             | RP 160           | •      | -           | _           |
|                             |      |             |             | RP 160<br>RP 540 | _      |             | -           |
| GV 6596 HiFi<br>GV 6596 NIC | -    |             |             | RP 540<br>RP 540 | -      |             |             |
| GV 0090 INIC                |      |             |             | KF 340           | -      |             |             |
| SE 6102 SV                  | -    | •           | •           | RP 500           | -      | •           | •           |
| SE 6104 VPT                 | -    | •           | •           | RP 540           | -      | •           |             |
| SE 6106 HiFi                | -    | •           | •           | RP 540           | -      | •           | •           |

Video

### **Continuous Operation and Special Functions GV 200 to GV 280**

Press the "Code" button, enter code number 85 .. and press the "OK" button.

| Function        | Code | GV 200 | 201 | 201-1 | 210 | 211 | 220 | 230 | 240 | 250 | 280S | 280PC |   |
|-----------------|------|--------|-----|-------|-----|-----|-----|-----|-----|-----|------|-------|---|
| Electronic Lock | 8500 | 3)     | 3)  | -     | 3)  | 3)  | 3)  | 3)  | 3)  | 3)  | 4)   | 4)    | l |

Press the "Code" button, enter code number 8501, press "OK" and function button(s).

| Function                    | Code | GV 200 | 201 | 201-1 | 210 | 211 | 220 | 230 | 240 | 250 | 280S | 280PC |
|-----------------------------|------|--------|-----|-------|-----|-----|-----|-----|-----|-----|------|-------|
| Continuous Recording Prog 1 | 8501 | 1)     | -   | -     | -   | 2)  | -   | •   | •   | •   | 4)   | 4)    |
| Continuous Recording AV     | 8501 | 1)     | -   | -     | -   | 2)  | -   | •   | •   | •   | 4)   | 4)    |
| Continuous Playback         | 8501 | 1)     | -   | -     | -   | 2)  | -   | •   | •   | •   | 4)   | 4)    |
| Continuous Recording SAT    | 8501 | -      | -   | -     | -   | -   | -   | •   | •   | •   | 4)   | 4)    |

Press the "Code" button, enter code number 85 .. and press the "OK" button.

| Function                        | Code    | GV 200 | 201 | 201-1 | 210 | 211 | 220 | 230 | 240 | 250 | 280S | 280PC |
|---------------------------------|---------|--------|-----|-------|-----|-----|-----|-----|-----|-----|------|-------|
| V-insertion On                  | 8510    | •      | -   | -     | -   | •   | •   | •   | •   | •   | 4)   | 4)    |
| V-insertion Off                 | 8511    | •      | -   | -     | -   | •   | •   | •   | •   | •   | 4)   | 4)    |
|                                 |         |        |     |       |     |     |     |     |     |     |      |       |
| Video 1 16 Bit                  | 8516    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
| Video 2 16 Bit                  | 8517    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
|                                 |         |        |     |       |     |     |     |     |     |     |      |       |
| HF Modulator Off                | 8518    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
| HF Modulator On                 | 8519    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
|                                 |         |        |     |       |     |     |     |     |     |     |      |       |
| Reception of 10 Bit Code free   | 8526    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
| Reception of 10 Bit Code locked | 8527    | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
|                                 |         |        |     |       |     |     |     |     |     |     |      |       |
| Pause V-pulse Adjustment        | 8528    | •      | •   | -     | •   | •   | •   | •   | •   | •   | -    | -     |
|                                 |         |        |     |       |     |     |     |     |     |     |      |       |
| DOS 312/312 Lines On            | 8546    | -      | •   | -     | -   | -   | •   | •   | •   | •   | 4)   | 4)    |
| DOS 312/313 Lines On            | 8 5 4 7 | -      | •   | -     | -   | -   | •   | •   | •   | •   | 4)   | 4)    |
| D: 1 1 1 D 0"                   | 0.5.00  |        |     |       |     |     |     | .,  |     |     |      |       |
| Piezoelectric Beeper Off        | 8562    | 1)     | -   | -     | -   | 1)  | 1)  | 1)  | 1)  | -   | -    | -     |
| Piezoelectric Beeper On         | 8563    | 1)     | -   | -     | -   | 1)  | 1)  | 1)  | 1)  | -   | -    | -     |
|                                 | 0 = 0 0 |        |     |       |     |     |     |     |     |     |      |       |
| Cassette No. Archive            | 8596    | -      | -   | -     | -   | -   | -   | -   | -   | •   | 4)   | 4)    |

Video

Press the "Code" button, enter code number 85.. and press the "CASS" button.

| Function              | Code | GV 200 | 201 | 201-1 | 210 | 211 | 220 | 230 | 240 | 250 | 280S | 280PC |
|-----------------------|------|--------|-----|-------|-----|-----|-----|-----|-----|-----|------|-------|
| Data Programmer IDP 1 | 8527 | •      | •   | -     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |
| Data Programmer IDP 2 | 8528 | •      | •   | _     | •   | •   | •   | •   | •   | •   | 4)   | 4)    |

Press the "Code" button, enter code number 4934, press the Archive button and enter code 2264 and

| una                            |      |        |     |       |     | _   |     |     |     |     |      |      |  |
|--------------------------------|------|--------|-----|-------|-----|-----|-----|-----|-----|-----|------|------|--|
| Function                       | Code | GV 200 | 201 | 201-1 | 210 | 211 | 220 | 230 | 240 | 250 | 280S | 280S |  |
| Initialisation of the expanded |      |        |     |       |     |     |     |     |     |     |      |      |  |
| Archive Memory *               | 2264 | -      | -   | -     | -   | -   | -   | •   | -   | •   | 4)   | 4)   |  |

<sup>\*</sup> Please strictly observe the instructions given on page 1-21 of the Service Manual before expanding the memory!!!

- 1) Only Cityline recorders
- 2) Only Super Elite recorders
- 3) The Electronic Lock is entered with the Key function (see user instructions)
- 4) The "Code" button is not pressed for GV 280S and GV 280PC

3.30 Grundig Service

### Continuous Operation and Special Functions GV 400 to GV 4192

| Function        | Code | GV 400 | GV 400 GB | GV 400 OST | GV 400 VPS | GV 401 VPT | GV 402 | GV 404 SV | GV 405 EURO | GV 406 EURO | GV 409 | GV 410 | GV 410 VPS | GV 411 | GV 411 EAST | GV 411-1 | GV 411-2 | GV 412 | GV 414 SV | GV 415 EURO | GV 416 EURO | GV 4092 SV | GV 4092 VPS | GV 4192 SV | MV 4005 | MV 4105 | SE 4100 VPS | E 4104 | SE 4120 SV |
|-----------------|------|--------|-----------|------------|------------|------------|--------|-----------|-------------|-------------|--------|--------|------------|--------|-------------|----------|----------|--------|-----------|-------------|-------------|------------|-------------|------------|---------|---------|-------------|--------|------------|
| Electronic Lock | -    | 1)     | 2)        | 1)         | 2)         | 2)         | 1)     | 2)        | 2)          | 2)          | -      | 1)     | 2)         | 2)     | 1)          | 1)       | -        | 1)     | 2)        | 2)          | 2)          | 2)         | 2)          | 2)         | 1)      | 2)      | 1)          | 1)     | 2)         |

<sup>1)</sup> No code. Only press the Standby button until "LOCK" (locked) or "ULOC" (unlocked) is displayed.

Press the "Code" button, enter code number 8501, press "OK" and function button(s).

| Function                    | Code | GV 400 | GV 400 GB | GV 400 OST | GV 400 VPS | GV 401 VPT | GV 402 | GV 404 SV | GV 405 EURO | GV 406 EURO | GV 409 | GV 410 | GV 410 VPS | GV 411 | GV 411 EAST | GV 411-1 | GV 411-2 | GV 412 | GV 414 SV | GV 415 EURO | GV 416 EURO | GV 4092 SV | GV 4092 VPS | GV 4192 SV | MV 4005 | MV 4105 | SE 4100 VPS | SE 4104 SV | SE 4120 SV |
|-----------------------------|------|--------|-----------|------------|------------|------------|--------|-----------|-------------|-------------|--------|--------|------------|--------|-------------|----------|----------|--------|-----------|-------------|-------------|------------|-------------|------------|---------|---------|-------------|------------|------------|
| Continuous Recording Prog 1 | 8501 | -      | -         | •          | -          | •          | -      | -         | -           | -           | -      | •      | •          | •      | •           | •        | -        |        | •         | •           | •           | -          | -           | •          | •       | •       | •           | -          | -          |
| Continuous Recording AV     | 8501 | -      | -         | -          | -          | -          | -      | -         | -           | -           | -      | -      | •          | •      | -           | -        | -        | -      | •         | •           | •           | -          | -           | •          | -       | -       | -           | -          | -          |
| Continuous Playback         | 8501 | -      | -         | -          | -          | -          | -      | -         | -           | -           | -      | -      | •          | •      | -           | -        | -        | -      | •         | •           | •           | -          | -           | •          | -       | -       | -           | -          | -          |

Press the "Code" button, enter code number 85 .. and press "OK".

| Function V-insertion Off V-insertion On             | Code<br>8 5 1 0<br>8 5 1 1 | GV 400 |   | GV 400 OST | 400 | _   | 402 | ● ● GV 404 SV | 405 | _ | _ | GV 410 | ● ● GV 410 VPS | 41 | GV 411 EAST | 41 | 4 | GV 412 |   | ● ● GV 415 EURO | ● ● GV 416 EURO | ● ● GV 4092 SV | ● ● GV 4092 VPS | ● ● GV 4192 SV | _ | i i MV 4105 | ● ● SE 4100 VPS | ● ● SE 4104 SV | ● ● SE 4120 SV |
|---|----------------------------|--------|---|------------|-----|-----|-----|---------------|-----|---|---|--------|----------------|----|-------------|----|---|--------|---|-----------------|-----------------|----------------|-----------------|----------------|---|-------------|-----------------|----------------|----------------|
| EE Mode (AV2 -> AV1) On<br>EE Mode (AV2 -> AV1) Off | 8513<br>8514               | -      | • | -          | •   | • • |     | •             | • • | • |   | -      | •              | •  |             | -  | - | -      | • | •               | •               | •              | •               | •              | - | -           | •               | •              | •              |
| Video 1 Control Level<br>Video 2 Control Level      | 8516<br>8517               | -      | • | -          | •   | •   |     | •             | •   | • |   | -      | •              | •  |             | -  | - | -      | • | •               | •               | •              | •               | •              | - | -           | •               | •              | •              |
| HF Modulator Off<br>HF Modulator On                 | 8518<br>8519               | -      | • | -          | •   | • • |     | •             | • • | • |   | -      | •              | •  |             | -  | - | -      | • | •               | •               | •              | •               | •              | - | -           | •               | •              | •              |
| Pause V-pulse Adjustment                            | 8528                       | -      | • | -          | •   | •   | -   | •             | •   | • | - | -      | •              | •  | -           | -  | - | -      | • | •               | •               | •              | •               | •              | - | -           | •               | •              | •              |
| Piezoelectric Beeper Off<br>Piezoelectric Beeper On | 8562<br>8563               | -      | - | -          | -   | -   |     | -             | -   | - | - | -      | -              | -  |             | -  | - | -      | - | -               | -               | •              | •               | •              | - | -           | -               | -              | -              |
| Manual Station Tuning<br>Station Search             | 8570<br>8571               | -      | • | -          | •   | •   | -   | •             | •   | • | - | -      | •              | •  | -           | -  | - | -      | • | •               | •               | •              | •               | •              | - | -           | •               | •              | •              |

Video

<sup>2)</sup> No code. Only press the button marked with the key symbol, enter the personal ident number and press "OK".

# Continuous Operation and Special Functions GV 420 to GV 470 (Part 1)

| ` ,             |      | 20 VPT | 30 | 30 GB | 30 VPS | 34 SV | 35 EURO | 40 NIC | 40 VPS | 20 | 50 GB | 50 NIC | 50 VPT | 60 NIC | 60 VPT | 64 HiFi | 34 NIC | 65 EURO | ≥  | 0  | 20 S |   | ⊢  | 592 VPT SV |
|-----------------|------|--------|----|-------|--------|-------|---------|--------|--------|----|-------|--------|--------|--------|--------|---------|--------|---------|----|----|------|---|----|------------|
|                 |      | 42     | 4  | 4     | 4      | 4     | 4       | 4      | 4      | 4  | 4     | 4      | 4      | 46     | 46     | 4       | 46     | 4       | 4  | 4  | 4    |   | 4  | 4          |
| Function        | Code | ΛĐ     | ۸Э | ۸Đ    | ۸Э     | З     | ٨Э      | З      | ٨Э     | ΛĐ | ΛĐ    | Д      | ΛS     | ۸Э     | ۸Đ     | ΛĐ      | 9      | ΛĐ      | ۸Э | ٨Э | GΛ   |   | 9  | 9          |
| Electronic Lock | -    | 2)     | 1) | 2)    | 2)     | 2)    | 2)      | 2)     | 2)     | 2) | 2)    | 2)     | 2)     | 2)     | 2)     | 2)      | 2)     | 2)      | •  | 2) | 2)   | Ī | 2) | 2)         |

<sup>1)</sup> No code. Only press the Standby button until "LOCK" (locked) or "ULOC" (unlocked) is displayed.

Press the "Code" button, enter code 8501, press "OK" and the function button(s)

| Function                    | Code | GV 420 VPT | GV 430 | V 430 | V 430      | V 434 SV     | GV 435 EURO<br>GV 440 NIC | 440 | 450 | 450 | V 450        | , 450 | V 460        | V 460        | GV 464 HiFi | GV 464 NIC | GV 465 EURO | GV 469 M | GV 470 PC | GV 470 S |   | 4592 VPT | GV 4592 VPT SV |
|-----------------------------|------|------------|--------|-------|------------|--------------|---------------------------|-----|-----|-----|--------------|-------|--------------|--------------|-------------|------------|-------------|----------|-----------|----------|---|----------|----------------|
| Continuous Recording Prog 1 | 8501 | •          | -      | •     | •          | •            | • •                       | •   | •   | •   | •            | •     | •            | •            | •           | •          | •           | -        | •         | •        |   | •        | •              |
| Continuous Recording AV     | 8501 | •          | -      |       | •          | •            | • •                       |     |     |     |              | •     |              |              | •           | •          | •           | -        |           |          |   |          |                |
| Continuous Playback         | 8501 | •          | -      | •     | •          | •            | •                         | •   |     | •   | lacktriangle | •     | lacktriangle | lacktriangle | •           | •          | •           | -        | •         | •        |   | •        |                |
|                             |      | VPT        |        |       |            | \S\<br> <br> | NIC NIC                   |     |     | GB  | NIC          |       |              | VPT          | i.H.i.      | NIC        | EURO        | M        | PC        |          |   | VPT      | 2 VPT SV       |
|                             |      | / 420      | / 430  | / 430 | / 430      |              | 435                       |     |     |     | / 450        | / 450 | _            | _            | / 464       | / 464      | / 465       | / 469    | / 470     | / 470    |   |          | / 4592         |
| Function                    | Code | G\         | Ó      | 0     | <u>ن</u> ا | (D)          | שׁ כ                      | 3 3 | 9   | G\  | G/           | G     | G\           | G\           | Ó           | G          | Ó           | Ó        | Ó         | Ö        |   | GΛ       | G<br>G         |
| Data Programmer IDP 2       | 8528 | -          | -      | -     | -          | -            | - •                       | •   | •   | •   | •            | •     | •            | •            | •           | •          | •           | -        | •         | •        | İ | •        | •              |

Video

3.32 Grundig Service

<sup>2)</sup> No code. Only press the button marked with the key symbol, enter the personal code number and press the "OK" button.

# Continuous Operation and Special Functions GV 420 to GV 470 (Part 2)

Press the "Code" button, enter code 85 .. and press the "OK" button

| Function<br>V-insertion On   | Code<br>8 5 1 0    | ● GV 420 VPT | - GV 430 | ● GV 430 GB | 430 | ● GV 434 SV | <ul><li>GV 435 EURO</li></ul> | ● GV 440 NIC | <ul><li>GV 440 VPS</li></ul> | ● GV 450 | ● GV 450 GB | ● GV 450 NIC | ● GV 450 VPT | ● GV 460 NIC | ● GV 460 VPT | ● GV 464 HiFi | ● GV 464 NIC | <ul><li>GV 465 EURO</li></ul> | - GV 469 M | ● GV 470 PC | ● GV 470 S |   | ● GV 4592 VPT SV |
|--|--------------------|--------------|----------|-------------|-----|-------------|-------------------------------|--------------|------------------------------|----------|-------------|--------------|--------------|--------------|--------------|---------------|--------------|-------------------------------|------------|-------------|------------|---|------------------|
| V-insertion Off  | 8511               | •            | -        | •           | •   | •           | •                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| EE Mode (AV2 -> AV1) On<br>EE Mode (AV2 -> AV1) Off                                | 8513<br>8514       | •            | -        | •           | •   | •           | •                             | -            | -                            | -        | -           | -            | -            | -            |              | -             | -            | -                             | -          | -           | -          | - | -                |
| AV-Switching Voltage On AV-Switching Voltage Off                                   | 8513<br>8514       | -            | -        | -           | -   | -           | -                             | -            | -                            | -        | -           | -            | -            | -            | -            | -             | -            | -                             | -          | •           | •          | - | -                |
| Video 1 Control Level<br>Video 2 Control Level                                     | 8516<br>8517       | •            | -        | •           | •   | •           | •                             | •            | •                            | •        | •           | •            | •            | •            | • •          | •             | •            | •                             | -          | •           | •          | • | •                |
| HF Modulator Off<br>HF Modulator On  | 8518<br>8519       | •            | -        | •           | •   | •           | •                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| Reception of the 10 Bit Code free<br>Reception of the 10 Bit Code locked           | 8526<br>8527       | -            | -        | •           | •   | •           | •                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| Pause V-pulse Adjustment   | 8528               | •            | -        | •           | •   | •           | •                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| Automatic 16:9 Identification Off<br>Automatic 16:9 Identification On              | 8532<br>8533       | -            | -        | -           | -   | -           | -                             | -            | •                            | -        | -           | •            | •            | •            | • •          | •             | •            | -                             | -          | -           | -          | • | •                |
| Info Message for PAY-TV Stations Off Info Message for PAY-TV Stations On           | 8 5 4 2<br>8 5 4 3 | -            | -        | -           | -   | -           | -                             | -            | -                            | -        | -           | -            | -            | -            | -            | -             | -            | -                             | -          | •           | •          | - | -                |
| DOS 312/312 Lines On<br>DOS 312/313 Lines On                                       | 8 5 4 6<br>8 5 4 7 | -            | -        | -           | -   | -           | -                             | •            | •                            | •        | •           | •            | •            | •            | • •          | •             | •            | •                             | -          | •           | •          | • | •                |
| NICAM Test No<br>NICAM Test Yes  | 8560<br>8561       | -            | -        | -           | -   | -           | -                             | •            | -                            | -        | •           | •            | -            | •            | -            | -             | -            | -                             | -          | •           | •          | - | -                |
| Piezoelectric Beeper Off<br>Piezoelectric Beeper On                                | 8562<br>8563       | -            | -        | -           | -   | -           | -                             | -            | -                            | -        | -           | -            | -            | -            | -            | -             | -            | -                             | -          | -           | -          | • | •                |
| Manual Station Tuning<br>Station Search  | 8570<br>8571       | •            | -        | -           | -   | -           | -                             | •            | •                            | •        | •           | •            | •            | •            | • •          | •             | •            | •                             | -          | -           | -          | • | •                |
| All Playback Speeds with the Shuttle on the Remote Control Transmitter             | 8587               | -            | -        | _           | -   | -           | _                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| Only Picture Search Forward and Reverse with Shuttle on Remote Control Transmitter | 8588               | -            | -        | -           | -   | -           | _                             | •            | •                            | •        | •           | •            | •            | •            | •            | •             | •            | •                             | -          | •           | •          | • | •                |
| Changing the Cassette No. for the Archive  | 8596               | -            | -        | -           | -   | -           | -                             | -            | -                            | -        | -           | -            | -            | -            | -            | -             | -            | -                             | -          | •           | •          | - | -                |

Video

# Continuous Operation and Special Functions GV 500 to GV 565

Press the "Code" button, enter code number 8501, press "OK" and function button(s).

|                             |      | 500 GB |            | 500 SV /1    | 501 VPT      | 505 EURO     |              | 209 M  |              |   |              | S\           |              |              |              | 540 HiFi     | 540 NIC | 545 EURO | 560 HiFi     | HiFi / | 560HiFi LE | 560 NIC      | 565 EURO |
|-----------------------------|------|--------|------------|--------------|--------------|--------------|--------------|--------|--------------|---|--------------|--------------|--------------|--------------|--------------|--------------|---------|----------|--------------|--------|------------|--------------|----------|
| Function                    | Code | 9      | 9          | 9            | G۷           | G\           | G\           | G<br>G | G<br>G       | g | G<br>G       | 9            | G<br>G       | G۷           | ĠΛ           | ĠΛ           | 9       | GΛ       | G۷           | G۷     | G۷         | G\           | Ð        |
| Continuous Recording Prog 1 | 8501 | •      | •          | •            | -            | •            | •            | -      | •            | - | •            | •            | •            | •            | -            | -            | -       | -        | -            | -      | -          | -            | -        |
| Continuous Recording AV     | 8501 | •      | •          | •            | -            | lacktriangle | •            | -      | •            | - | •            | •            | •            | lacktriangle | -            | -            | -       | -        | -            | -      | -          | -            | -        |
| Continuous Playback         | 8501 | •      | lacksquare | lacktriangle | lacktriangle | •            | lacktriangle | -      | lacktriangle | • | lacktriangle | lacktriangle | lacktriangle | lacktriangle | lacktriangle | lacktriangle | •       | •        | lacktriangle | •      | •          | lacktriangle | •        |

Press the "Code" button, enter code number 85 .. and press "OK".

| Function                         | Code | GV 500 GB | GV 500 SV | GV 500 SV /1 | GV 501 VPT | GV 505 EURO | 506          | 509 | 510          | 511 | GV 515 EURO  | GV 530 SV    | GV 530 SV /1 | GV 535 EURO  | GV 540 GB | GV 540 HiFi | GV 540 NIC | GV 545 EURO | GV 560 HiFi | GV 560 HiFi /5 | GV 560HIFI LE |              | GV 565 EURO  |
|----------------------------------|------|-----------|-----------|--------------|------------|-------------|--------------|-----|--------------|-----|--------------|--------------|--------------|--------------|-----------|-------------|------------|-------------|-------------|----------------|---------------|--------------|--------------|
| V-insertion On                   | 8510 | •         | •         | •            | •          | •           | •            | -   | •            | •   | •            | •            | •            | •            | •         | •           | •          | •           | •           | •              | •             | •            | •            |
| V-insertion Off                  | 8511 | •         | •         | •            | •          | •           | •            | -   | •            | •   | •            | •            | •            | •            | •         | •           | •          | •           | •           | •              | •             | •            | •            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| EE Mode (AV2 -> AV1) On          | 8513 | •         | •         | •            | •          | •           | lacktriangle | -   | lacktriangle | •   | lacktriangle | lacktriangle | lacktriangle | lacktriangle | •         | •           | •          | •           | •           | •              | •             | lacktriangle | •            |
| EE Mode (AV2 -> AV1) Off         | 8514 | •         | •         | •            | •          | •           | lacktriangle | -   | lacktriangle | •   | ullet        | lacktriangle | ullet        | ullet        | •         | •           | •          | •           | •           | •              | •             | lacktriangle | •            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| Video 1 Control Level            | 8516 | •         | •         | •            | •          | •           | lacktriangle | -   | •            | •   | ullet        | •            | ullet        | ullet        | •         | •           | •          | •           | •           | •              | •             | lacktriangle | lacktriangle |
| Video 2 Control Level            | 8517 | •         | •         | •            | •          | •           | ullet        | -   | ullet        | •   | ullet        | ullet        | ullet        | ullet        | •         | •           | •          | •           | •           | •              | •             | lacktriangle | •            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| HF Modulator Off                 | 8518 | •         | •         | •            | •          | •           | lacktriangle | -   | •            | •   | ullet        | •            | ullet        | ullet        | •         | •           | •          | •           | •           | •              | •             | lacktriangle | lacktriangle |
| HF Modulator On                  | 8519 | •         | •         | •            | •          | •           | lacktriangle | -   | lacktriangle | •   | ullet        | lacktriangle | ullet        | ullet        | •         | •           | •          | •           | •           | •              | •             | lacktriangle | •            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| DOS 312/312 Lines On (for 50Hz)  | 8546 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | -            | -         | -           | -          | -           | •           | •              | •             | lacktriangle | lacktriangle |
| DOS 312/313 Lines On (for 100Hz) | 8547 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | -            | -         | -           | -          | -           | •           | •              | •             | lacktriangle | •            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| NICAM Test No                    | 8560 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | -            | -         | -           | •          | -           | -           | -              | -             | lacksquare   | -            |
| NICAM Test Yes                   | 8561 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | -            | -         | -           | •          | -           | -           | -              | -             | lacktriangle | -            |
|                                  |      |           |           |              |            |             |              |     |              |     |              |              |              |              |           |             |            |             |             |                |               |              |              |
| Piezoelectric Beeper Off         | 8562 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | •            | -         | -           | -          | -           | -           | -              | -             | ı - I        | -            |
| Piezoelectric Beeper On          | 8563 | -         | -         | -            | -          | -           | -            | -   | -            | -   | -            | -            | -            | lacktriangle | -         | -           | -          | -           | -           | -              | -             | ı <b>-</b>   | -            |

Video

3.34 Grundig Service

# Continuous Operation and Special Functions GV 5000 to GV 5695

Press the "Code" button, enter code number 8501, press the "OK" and function button(s)

| Function                    | Code | GV 5000 | V 5000 | 3V 5000 GB | 3V 5000 SAA | 3V 5000 VPS | >   | ۷Р  | 3V 5003 | 3V 5008 SV | 3V 5050 |   | 3V 5050 SV /1 |   |   |   |   | VPS | 3V 5300 VPS /5 | 3V 5305 EURO | 3V 5395 SV | 3V 5395 SV /1 | 3V 5400 EURO | 3V 5400 HiFi | 3V 5400 NIC | 3V 5695 HiFi         |  |
|-----------------------------|------|---------|--------|------------|-------------|-------------|-----|-----|---------|------------|---------|---|---------------|---|---|---|---|-----|----------------|--------------|------------|---------------|--------------|--------------|-------------|----------------------|--|
| Continuous Recording Prog 1 | 8501 | -       | )      | )          | -           | -           | ) - | ) - | -       | -          | -       | • | •             | • | • | • | - | -   | -              | -            | •          | •             | -            | -            | -           | $\overline{\bullet}$ |  |
| Continuous Recording AV     | 8501 | -       | -      | -          | -           | -           | -   | -   | -       | -          | -       | • | •             | • | • | • | - | -   | -              | -            | •          | •             | -            | -            | -           | •                    |  |
| Continuous Playback         | 8501 | -       | -      | -          | -           | -           | -   | -   | -       | -          | -       | • | •             | • | • | • | - | -   | -              | -            | •          | •             | -            | -            | -           | •                    |  |

Press the "Code" button, enter code number 85 .. and press "OK"

| Function                          | Code         | GV 5000 | GV 5000 EURO | GV 5000 GB | 5000 | GV 5000 VPS | 2000 |   |   | GV 5008 SV | 5050 | 5050 | GV 5050 SV /1 | 5055 | GV 5095 SV | 2002 |   | 5300 | GV 5300 VPS /5 |   | GV 5395 SV | 5395 | 5400 |   | 5400 | GV 5695 HiFi |
|-----------------------------------|--------------|---------|--------------|------------|------|-------------|------|---|---|------------|------|------|---------------|------|------------|------|---|------|----------------|---|------------|------|------|---|------|--------------|
| V-insertion On<br>V-insertion Off | 8510<br>8511 | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    |              |
| V-IIISCILIOII OII                 | 0311         | Ē       | _            |            | -    | _           | _    | _ | _ | _          | _    |      |               |      |            |      | _ | _    | _              | _ |            |      |      |   |      |              |
| EE Mode (AV2 -> AV1) On           | 8513         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |
| EE Mode (AV2 -> AV1) Off          | 8514         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    |              |
| Video 1 Control Level             | 8516         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |
| Video 2 Control Level             | 8517         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |
| HF Modulator Off                  | 8518         |         |              |            |      |             |      |   |   |            |      |      |               |      |            |      |   |      |                |   |            |      |      |   |      |              |
| HF Modulator On                   | 8519         | -       | -            | -          | -    | -           | -    | - | - |            | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - |      | •            |
|                                   |              |         |              |            |      |             |      |   |   |            |      |      |               |      |            |      |   |      |                |   |            |      |      |   |      |              |
| Reception of 10 Bit Code free     | 8526         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |
| Reception of 10 Bit Code blocked  | 8527         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    |              |
| Pause V-pulse Adjustment          | 8528         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | •    | •             | •    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | _ r          |
|                                   |              |         |              |            |      |             |      |   |   |            |      |      |               |      |            |      |   |      |                |   |            |      |      |   |      |              |
| DOS 312/312 Lines On (for 50Hz)   | 8546         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | -    | -             | -    | -          | -    | - | -    | -              | - | -          | -    | -    | - | -    | •            |
| DOS 312/313 Lines On (for 100Hz)  | 8547         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | -    | -             | -    | -          | -    | - | -    | -              | - | -          | -    | -    | - | -    |              |
| Piezoelectric Beeper Off          | 8562         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | -    | -             | -    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |
| Piezoelectric Beeper On           | 8563         | -       | -            | -          | -    | -           | -    | - | - | -          | -    | -    | -             | -    | •          | •    | - | -    | -              | - | •          | •    | -    | - | -    | •            |

Video

# Continuous Operation and Special Functions GV 25, GV 45, KV 5..., SE 51..

Press the "Code" button, enter code number 8501, press the "OK" and function button(s)

| Function                    | Code | GV 25 SV /5 | GV 45 SV /5 | KV 5001 VPS /5 | KV 5301 VPS /5 | SE 5102 SV | SE 5104 SV | SE 5106 HIFI |  |
|-----------------------------|------|-------------|-------------|----------------|----------------|------------|------------|--------------|--|
| Continuous Recording Prog 1 | 8501 | -           | -           | -              | -              | •          | •          | •            |  |
| Continuous Recording AV     | 8501 | -           | -           | -              | -              | •          | •          | •            |  |
| Continuous Playback         | 8501 | -           | -           | -              | -              | •          | •          | •            |  |

Press the "Code" button, enter code number 85 .. and press "OK"

| V-insertion On       8 5 1 0   | Function                              | Code | GV 25 SV /5 | GV 45 SV /5 | KV 5001 VPS /5 | KV 5301 VPS /5 | SE 5102 SV |              | SE 5106 HIFI |
|--|---------------------------------------|------|-------------|-------------|----------------|----------------|------------|--------------|--------------|
| V-insertion Off       8 5 1 1       - <td></td> <td></td> <td><u> </u></td> <td>-</td> <td><u> </u></td> <td>_</td> <td>•</td> <td>•</td> <td>•</td> |                                       |      | <u> </u>    | -           | <u> </u>       | _              | •          | •            | •            |
| EE Mode (AV2 -> AV1) On EE Mode (AV2 -> AV1) Off  Video 1 Control Level  Video 2 Control Level  HF Modulator Off  HF Modulator On  Pause V-pulse Adjustment  B 5 2 8   |                                       |      | -           | _           |                | -              | •          |              |              |
| EE Mode (AV2 -> AV1) Off       8 5 1 4   | v-insertion Oil                       | 8511 | -           | -           | -              | _              | _          |              |              |
| EE Mode (AV2 -> AV1) Off       8 5 1 4   | EE Modo (A\/2 > A\/1\ On              | 0512 |             |             |                |                |            |              |              |
| Video 1 Control Level       8 5 1 6  |                                       |      | -           | -           | -              | -              | _          | •            |              |
| Video 2 Control Level       8 5 1 7  | EE Mode (AV2 -> AV1) Off              | 8514 | -           | _           | -              | -              | •          | •            | •            |
| Video 2 Control Level       8 5 1 7  |                                       |      |             |             |                |                |            |              |              |
| HF Modulator Off HF Modulator On  Pause V-pulse Adjustment  8 5 1 8  | Video 1 Control Level                 | 8516 | -           | -           | -              | -              | •          | •            | •            |
| HF Modulator On       8 5 1 9  | Video 2 Control Level                 | 8517 | -           | -           | -              | -              | •          | •            | •            |
| HF Modulator On       8 5 1 9  |                                       |      |             |             |                |                |            |              |              |
| Pause V-pulse Adjustment  8 5 2 8  | HF Modulator Off                      | 8518 | -           | -           | -              | -              | •          | •            | •            |
| DOS 312/312 Lines On (for 50Hz)  B 5 4 6   | HF Modulator On                       | 8519 | -           | -           | -              | -              | •          | lacktriangle | •            |
| DOS 312/312 Lines On (for 50Hz)  B 5 4 6   |                                       |      |             |             |                |                |            |              |              |
| DOS 312/313 Lines On (for 100Hz)   | Pause V-pulse Adjustment              | 8528 | -           | -           | -              | -              | •          | •            | -            |
| DOS 312/313 Lines On (for 100Hz)   |                                       |      |             |             |                |                |            |              |              |
| DOS 312/313 Lines On (for 100Hz)   | DOS 312/312 Lines On (for 50Hz)       | 8546 | -           | -           | -              | -              | -          | -            | •            |
| Piezoelectric Beeper Off 8 5 6 2 • • • •   | · · · · · · · · · · · · · · · · · · · | 8547 | -           | -           | -              | -              | -          | -            | •            |
|  |                                       |      |             |             |                |                |            |              |              |
|  | Piezoelectric Beeper Off              | 8562 | -           | -           | -              | -              | •          | •            | •            |
| Piezoelectric Beeper On   8 5 6 3   -   -     -   -     ●   ●  |                                       | 8563 | l _         | _           | _              | l _            | •          | •            | •            |

Video

3.36 Grundig Service

# Continuous Operation and Special Functions GV 600 to GV 690

Press the "Code" button, enter code number 8501, press the "OK" and function button(s)

| Function                    | Code | GV 600 SV | 0 | GV 605 EURO | 6 | V 630 | GV 630 SV/1 | GV 635 EURO | GV 640 HIFI | GV 640 NIC | GV 645 EURO | GV 650 HIFI | GV 660 HIFI | GV 660 NIC | GV 665 EURO | GV 670 S NIC | GV 670S HiFi | GV 690 S HiFi | GV 690 S NIC |
|-----------------------------|------|-----------|---|-------------|---|-------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------|-------------|--------------|--------------|---------------|--------------|
| Continuous Recording Prog 1 | 8501 | -         | - | -           | - | -     | •           |             | -           |            |             | -           |             | -          | -           | -            | -            | -             | -            |
| Continuous Recording AV     | 8501 | -         | - | -           | - | -     | -           | -           | -           | -          | -           | -           | -           | -          | -           | -            | -            | -             | -            |
| Continuous Playback         | 8501 | -         | - | -           | - | •     | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |

Press the "Code" button, enter code number 85 .. and press "OK"

| Function                         | Code | GV 600 SV | GV 600 SV/1 | GV 605 EURO | GV 609 M | GV 630 SV | GV 630 SV/1 | GV 635 EURO | GV 640 HiFi | GV 640 NIC | GV 645 EURO | GV 650 HIFI | GV 660 HIFi | GV 660 NIC | GV 665 EURO | GV 670 S NIC | GV 670S HiFi | GV 690 S HiFi | GV 690 S NIC |
|----------------------------------|------|-----------|-------------|-------------|----------|-----------|-------------|-------------|-------------|------------|-------------|-------------|-------------|------------|-------------|--------------|--------------|---------------|--------------|
| V-insertion On                   | 8510 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             |              |
| V-insertion Off                  | 8511 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             |              |
| EE Mode (AV2 -> AV1) On          | 8513 | _         | _           | _           |          | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             |              |
| EE Mode (AV2 -> AV1) Off         | 8514 |           | _           | _           | _        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
| Ez Modo (XVZ > XV I) OII         | 0011 |           |             |             |          |           |             |             |             |            |             | _           | _           | _          | _           |              |              |               |              |
| Video 1 Control Level            | 8516 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
| Video 2 Control Level            | 8517 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
|                                  |      |           |             |             |          |           |             |             |             |            |             |             |             |            |             |              |              |               |              |
| HF Modulator Off                 | 8518 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
| HF Modulator On                  | 8519 | -         | -           | -           | -        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
| B                                |      |           |             |             |          |           |             |             |             |            |             |             |             |            |             |              |              |               |              |
| Reception of 10 Bit Code free    | 8526 | -         | -           | -           | -        |           | _           | •           |             |            | •           | -           |             |            |             | •            | •            | •             |              |
| Reception of 10 Bit Code blocked | 8527 | -         | -           | -           | -        | •         | _           |             | _           | _          | _           | •           | _           | _          | _           | •            | •            | •             |              |
| DOS 312/312 Lines On (for 50Hz)  | 8546 | _         | _           | _           |          | •         | •           |             | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             |              |
| DOS 312/313 Lines On (for 100Hz) | 8547 |           | -           | -           | _        | •         | •           | •           | •           | •          | •           | •           | •           | •          | •           | •            | •            | •             | •            |
| 2 2 2 3 . 2, 3 13 2(31 133 12)   | 30.7 |           |             |             |          |           |             |             |             |            |             |             |             |            |             |              |              |               |              |
| NICAM Test No                    | 8560 | -         | -           | -           | -        | -         | -           | -           | -           | •          | -           | -           | -           | •          | -           | •            | -            | -             | •            |
| NICAM Test Yes                   | 8561 | -         | -           | -           | -        | -         | -           | -           | -           | •          | -           | -           | -           | •          | -           | •            | -            | -             | •            |

Video

# Continuous Operation and Special Functions GV 6000 to GV 6596

Press the "Code" button, enter code number 8501, press the "OK" and function button(s)

| Function                    | Code | GV 6000 EURO | V 6000 | GV 6000 SV/1 |   | 3V 6066 | 3V 6096 SV | 3V 6096 SV/1 | GV 6300 EURO | GV 6300 SV | GV 6300 SV/1 | 3V 6396 VPT | 3V 6400 EURO | 3V 6400 HiFi | 3V 6400 HiFi/5 | 3V 6400 NIC | 3V 6401 NIC | 3V 6596 HiFi | 3V 6596 NIC |
|-----------------------------|------|--------------|--------|--------------|---|---------|------------|--------------|--------------|------------|--------------|-------------|--------------|--------------|----------------|-------------|-------------|--------------|-------------|
| Continuous Recording Prog 1 | 8501 | -            | -      | -            | - | •       | •          | •            | -            | -          | -            | •           | -            | -            | -              | -           | -           | •            | •           |
| Continuous Recording AV     | 8501 | -            | -      | -            | - | •       | •          | •            | -            | -          | -            | •           | -            | -            | -              | -           | -           |              | •           |
| Continuous Playback         | 8501 | -            | -      | -            | - | •       | •          | •            | -            | -          | -            | •           | -            | -            | -              | -           | -           | •            | •           |

Press the "Code" button, enter code number 85 .. and press "OK"

| Function                         | Code    | GV 6000 EURO | CV 6000 SV | GV 6000 SV/1 | GV 6001 V+ | GV 6066 | CV 6096 SV | GV 6096 SV/1 | GV 6300 EURO | GV 6300 SV | GV 6300 SV/1   | GV 6396 VPT | GV 6400 EURO | GV 6400 HiFi | GV 6400 HIFI/5 | GV 6400 NIC | GV 6401 NIC | GV 6596 HIFI | GV 6596 NIC |
|----------------------------------|---------|--------------|------------|--------------|------------|---------|------------|--------------|--------------|------------|----------------|-------------|--------------|--------------|----------------|-------------|-------------|--------------|-------------|
| V-insertion On                   | 8510    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
| V-insertion Off                  | 8511    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
|                                  |         |              |            |              |            |         |            |              |              |            |                |             |              |              |                |             |             |              |             |
| EE Mode (AV2 -> AV1) On          | 8513    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
| EE Mode (AV2 -> AV1) Off         | 8514    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
|                                  |         |              |            |              |            |         |            |              |              |            |                |             |              |              |                |             |             |              |             |
| Video 1 Control Level            | 8516    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
| Video 2 Control Level            | 8517    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
|                                  |         |              |            |              |            |         |            |              |              |            |                |             |              |              |                |             |             |              |             |
| HF Modulator Off                 | 8518    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | -           | •            | •           |
| HF Modulator On                  | 8519    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | -            | -            | -              | -           | _           | •            | •           |
| D (1.40 B); O 1.4                | 0.5.0.0 |              |            |              |            |         |            |              |              |            |                |             |              |              |                |             |             |              |             |
| Reception of 10 Bit Code free    | 8526    | -            | -          | -            | -          | •       |            |              | -            | -          | -              | _           | -            | -            | -              | -           | -           |              |             |
| Reception of 10 Bit Code blocked | 8527    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           | _            | -            | -              | -           | _           | _            | _           |
| DOS 212/212 Lines On /for FOUT   | 8546    | -            | -          |              |            |         |            |              | -            |            |                |             |              | -            |                |             |             |              |             |
| DOS 312/312 Lines On (for 50Hz)  | 8547    |              | _          | -            | -          |         |            |              | -            | -          | -              | •           | -            | _            | _              | _           | _           |              |             |
| DOS 312/313 Lines On (for 100Hz) | 0 3 4 7 | _            |            | _            | _          |         |            |              | -            | _          | _              |             | _            |              |                |             | _           |              |             |
| Piezoelectric Beeper Off         | 8562    | -            | -          | -            | -          | •       | •          | •            | -            | -          | -              | •           |              |              |                |             |             |              |             |
| Piezoelectric Beeper On          | 8563    | -            |            |              |            | •       | •          | •            | _            | _          | <u> </u>       | •           | <u> </u>     |              |                |             | _           | •            | •           |
| 1 10200100tillo Deepel Oli       | 0000    | 1 -          | _          | -            | -          | -       | -          | -            | -            | l ¯        | l <sup>-</sup> |             | l -          | _            | _              | _           | l -         | -            | -           |

Video

3.38 Grundig Service

# **Continuous Operation and Special Functions GVP 600, GV 26, GV 46, SE 61..**

Press the "Code" button, enter code number 8501, press the "OK" and function button(s)

| Function                    | Code | GVP 600 ICN EURO | GV 26 | GV 26 EURO | GV 26 VPS | GV 46 | GV 46 VPS | SE 6102 SV | SE 6104 VPT | SE 6106 HiFi |   |
|-----------------------------|------|------------------|-------|------------|-----------|-------|-----------|------------|-------------|--------------|---|
| Continuous Recording Prog 1 | 8501 | -                | -     | -          | -         | -     | -         | •          | •           | •            | ĺ |
| Continuous Recording AV     | 8501 | -                | -     | -          | -         | -     | -         | •          | •           | •            | ı |
| Continuous Playback         | 8501 | -                | -     | -          | -         | -     | -         | •          | •           | •            |   |

Press the "Code" button, enter code number 85 .. and press "OK"

| Function                         | Code | GVP 600 ICN EURO |   | GV 26 | GV 26 EURO | GV 26 VPS | GV 46 | GV 46 VPS | SE 6102 SV | SE 6104 VPT | SE 6106 HiFi |   |
|----------------------------------|------|------------------|---|-------|------------|-----------|-------|-----------|------------|-------------|--------------|---|
| V-insertion On                   | 8510 | -                |   | -     | -          | •         |       | •         | •          | •           | •            |   |
| V-insertion Off                  | 8511 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  |   |       |            |           |       |           |            |             |              |   |
| EE Mode (AV2 -> AV1) On          | 8513 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
| EE Mode (AV2 -> AV1) Off         | 8514 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  | İ |       |            |           |       |           |            |             |              |   |
| Video 1 Control Level            | 8516 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
| Video 2 Control Level            | 8517 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  |   |       |            |           |       |           |            |             |              |   |
| HF Modulator Off                 | 8518 | -                | ĺ | -     | -          | -         | -     | -         | •          | •           | •            |   |
| HF Modulator On                  | 8519 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  |   |       |            |           |       |           |            |             |              |   |
| Reception of 10 Bit Code free    | 8526 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            | ' |
| Reception of 10 Bit Code blocked | 8527 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  |   |       |            |           |       |           |            |             |              |   |
| DOS 312/312 Lines On (for 50Hz)  | 8546 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
| DOS 312/313 Lines On (for 100Hz) | 8547 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
|                                  |      |                  |   |       |            |           |       |           |            |             |              |   |
| Piezoelectric Beeper Off         | 8562 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |
| Piezoelectric Beeper On          | 8563 | -                |   | -     | -          | -         | -     | -         | •          | •           | •            |   |

Grundig Service 3.39

## **Cancelling the Electronic Lock (Part 1)**

### **VS 200 to VS 267**

- Switch the video recorder off
- Remove the top of the cabinet
- Unplug the B1 connector on the sequence control
- Switch the recorder on
- After approx. 2 seconds, re-insert the B1 connector
- Switch the video recorder off
- Re-fit the top of the cabinet

### VS 300 to VS 460

- Switch the video recorder off
- Remove the top of the cabinet
- Switch the recorder on
- Interconnect the service test points on the keyboard control unit for a short period
- Press the STOP button
- Switch the video recorder off
- Re-fit the top of the cabinet

### **VS 500**

- Enter the numbers 4934 on the remote control handset in this order and confirm with the button "0000"
- Press the STOP button

### **VS 505 to VS 510**

- Enter the numbers 4934 on the remote control handset in this order and confirm with the "OK" button
- Press the STOP button

### VS 520 to VS 550

Video

- Switch the video recorder off
  - Remove the top of the cabinet
- Switch the recorder on
- Interconnect the service test points on the keyboard control unit for a short period
- Press the STOP button
- Switch the video recorder off
- Re-fit the top of the cabinet

### VS 600 to VS 960

- Enter the numbers 4934 on the remote control handset in this order and confirm with the "OK" button
- Press the STOP button

### GV 200 to GV 250

- Press the "CODE" button on the remote control handset
- Enter the numbers 4934 on the remote control handset in this order and confirm with the "OK" button
- Press the STOP button

### **GV 201-1**

- Press the "STANDBY" button on the remote control handset until "FREE" is indicated on the display of the video recorder.

### **Cancelling the Electronic Lock (Part 2)**

### **GV 280PC, GV 280S**

- Enter the numbers 4934 in this order on the remote control handset and confirm with the
   "OK" button
- Press the STOP button

### GV 400, GV 400 GB and GV 400 EAST

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### GV 400 VPS and GV 401 VPT

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the recorder from the mains

### **GV 402**

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### GV 404 SV, GV 405 EURO and GV 406 EURO

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the recorder from the mains

### **GV 410**

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### **GV 410 VPS and GV 411**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the recorder from the mains

### **GV 411-1**

- Press and hold the "STAND-BY" button on the remote control handset (ca.5 seconds), until "UNLOCKED" appears on the display of the recorder.

### GV 411-2

Without parental lock / electronic lock

### **GV 411 OST and GV 412**

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### GV 414 SV, GV 415 EURO, GV 416 EURO and GV 420 VPT

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the recorder from the mains

Video

# **Cancelling the Electronic Lock (Part 3)**

### GV 430 and GV 430 GB

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### **GV 430 VPS, GV 434 SV and GV 435 EURO**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### GV 440 ..., GV 450 ..., GV 460 ..., GV 464 ..., GV 465 EURO and GV 470 ...

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### GV 4000 VPS and GV 4001

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### **GV 4003 VPS**

- With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "FREE" appears on the display of the recorder.

# GV 4010 SV-VPT, GV 4092 ... , GV 4192 VPS, GV 4200 SV-VPT, GV 4400 HiFi und GV 4592 ...

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### Video

### SE 4100 VPS, SE 4104 SV and SE 4120 SV

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### MV 4005 and MV 4105

 With the video recorder switched off (Stand-by) press the Stop button on the remote control handset until "UNLO" appears on the display of the recorder.

### GV 500 ..

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### **GV 501 VPT**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

3.42 Grundig Service

# **Cancelling the Electronic Lock (Part 4)**

### **GV 505 EURO, GV 506 EURO**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### **GV 509 M**

Without parental lock / electronic lock

### **GV 510 SV**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### **GV 511**

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

# GV 515 EURO, GV 530 ... , GV 535 EURO, GV 540 ... , GV 545 EURO, GV 560 ... and GV 565 EURO

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### GV 5000, GV 5000 GB, GV 5000 VPS and GV 5000 VPS/5

- Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### **GV 5000 SAA**

- Press the "STAND-BY" button on the remote control handset until "UNLOCKED" appears on the display of the recorder.

### GV 5002 VPS, GV 5003, GV 5008 und GV 5050

- Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### GV 5050 SV, GV 5050 SV/1, GV 5055 EURO and GV 5095 ..

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### GV 5300 ...

- Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### GV 5395 ..., GV 5400 .. and GV 5695 HiFi

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

Video

# **Cancelling the Electronic Lock (Part 5)**

### GV 25 SV/5 and GV 45 SV/5

- Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### KV 5001 VPS/5 and KV 5301 VPS/5

 Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### SE 5102 SV, SE 5104 SV and SE 5106 HiFi

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

# GV 600, GV 630, GV 640 HIFI, GV 640 NIC, GV 645 EURO, GV 650 HIFI, GV 660 HIFI, GV 660 NIC, GV 665 EURO, GV 670 S HIFI, GV 670 S NIC, GV 690 S HIFI, GV 690 S NIC

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### GV 6096 SV, GV 6096 SV/1, GV 6396 SV, GV 6396 SV, GV 6596 HIFI, GV 6596 NIC

- Press the "CODE" button on the remote control handset
- Enter the numbers 4 9 3 4 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### SE 6102 SV, SE 6104 SV, SE 6106 HIFI

- Press the "CODE" button on the remote control handset
- Enter the numbers 4934 in this order and confirm with the "OK" button
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### **GVP 600 ICN EURO**

- Press the "STAND-BY" button on the remote control handset until "FREE" appears on the display of the recorder.

### **GV 7xx**

Information on cancelling the parental lock has not yet been available on editorial close. Please try the following: Press "CODE - 4934 - OK - STANDBY" in this order or press the "STAND-BY" button and hold it for a short time (more than 5 seconds).

Video

3.44 Grundig Service

# **Cancelling the Electronic Lock (Part 6)**

### **TVR 3700**

- Press and hold the Stop button on the remote control handset and depress the Play button on the video recorder
- Press the "STAND-BY" button or disconnect the video recorder from the mains

### **TVR 3710**

- Press the cursor buttons on the remote control handset in this order 🔊 🖾 🤝

### TVR 4500 and TVR 4510

- Switch the unit off and disconnect it from the mains
- Remove the rear of the cabinet
- Disconnect the cable and pull the video recorder out of the cabinet towards the back
- Connect the unit to the mains and switch it on
- Interconnect the service test points on the keyboard control unit for a short period
- Switch the unit off and disconnect it from the mains
- Push the video recorder into the cabinet from the back and connect the cable
- Re-fit the rear of the cabinet

### TVR 5100 and TVR 5500

- Press the cursor buttons on the remote control handset in this order  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$ 

### **TVR 5510**

- Switch the unit off and disconnect it from the mains
- Remove the rear of the cabinet
- Disconnect the cable and pull the video recorder out of the cabinet towards the back
- Connect the unit to the mains and switch it on
- Interconnect the service test points on the keyboard control unit for a short period
- Switch the unit off and disconnect it from the mains
- Push the video recorder into the cabinet from the back and connect the cable
- Re-fit the rear of the cabinet

Video

# Measuring and Adjustment Equipment/Aids for Video Recorders (Part 1)

| Designation              | Part No.     | VS 500 | VS 505 |              |       | VS 530 |              |              | VS 600 |   |   |   |              |              |              | VS 680 | VS 700 | VS 710 | VS 720 | VS 740 | VS 790       | VS 800       | VS 820       |
|--------------------------|--------------|--------|--------|--------------|-------|--------|--------------|--------------|--------|---|---|---|--------------|--------------|--------------|--------|--------|--------|--------|--------|--------------|--------------|--------------|
| Tape Tension Meter       | 75987-262.74 | •      | •      | •            | •     | •      | •            | •            | •      | • | • | • | •            | •            | •            | •      | •      | •      | •      | •      | •            | •            | •            |
| Adjustment Plate         | 75987-262.75 | •      | •      | •            | •     | •      | lacktriangle | •            | •      | • | • | • | •            | ullet        | •            | •      | •      | •      | •      | •      | •            | •            | •            |
| Adjustment Screwdriver   | 75987-262.80 | •      | •      | •            | •     | •      | lacktriangle | lacktriangle | •      | • | • | • | lacktriangle | ullet        | lacktriangle | •      | •      | •      | •      | •      | lacktriangle | lacktriangle | •            |
| Height Gauge             | 75987-262.87 | •      | •      | •            | •     | •      | lacktriangle | •            | •      | • | • | • | •            | ullet        | •            | •      | •      | •      | •      | •      | •            | •            |              |
| Height Dial Gauge        | 75987-262.76 | •      | •      | •            | •     | •      | lacktriangle | lacktriangle | •      | • | • | • | lacktriangle | ullet        | lacktriangle | •      | •      | •      | •      | •      | lacktriangle | lacktriangle | •            |
| Tension Gauge 0.1N to 1N | 72001-401.00 | •      | •      | •            | •     | •      | •            | •            | •      | • | • | • | •            | ullet        | •            | •      | •      | •      | •      | •      | •            | •            |              |
| Tension Gauge 0.5N to 5N | 72001-403.00 |        |        |              |       |        |              |              |        |   |   |   |              |              | •            |        |        |        |        |        |              |              |              |
| Headwheel Extractor      | 75987-262.96 | •      | •      | •            | •     | •      | lacktriangle | •            | •      | • | • | • | •            | ullet        | •            | •      | •      | •      | •      | •      | •            | •            |              |
| Reference Plate          | 75987-262.86 | •      | ullet  | lacktriangle | ullet | •      | ullet        | lacktriangle | •      | • | • | • | ullet        | ullet        | ullet        | •      | ullet  | ullet  | •      | •      | lacktriangle | •            | •            |
| Hex Head Wrench 2mm      | 72004-082.00 |        |        |              |       |        |              |              |        |   |   |   |              |              |              |        | •      | •      | •      | •      | •            | •            |              |
| Service Adapter 501      | 27505-033.01 |        |        |              | •     | •      | lacktriangle | lacktriangle |        |   |   |   |              |              |              | •      |        |        |        |        |              |              |              |
| Service Adapter 502      | 27505-034.01 |        |        |              | •     | •      | lacktriangle | •            |        |   |   |   |              |              |              |        |        |        |        |        |              |              |              |
| Service Adapter 503      | 27505-036.01 |        |        |              | •     | •      | lacktriangle | lacktriangle |        |   |   |   |              |              | lacktriangle |        | •      | •      | •      | •      | •            | lacktriangle | •            |
| Service Adapter Set      | 72008-453.50 |        |        |              |       |        |              |              |        |   |   |   |              |              |              | •      |        |        |        |        |              |              |              |
| Test Cassette            | 9.27540-1016 | •      | •      | •            | •     | •      | lacktriangle | •            | •      | • | • | • | •            | •            | •            | •      | •      | •      | •      | •      | lacktriangle | •            | lacktriangle |
| Test Cassette FM-Sound   | 9.27540-1011 | •      | •      | •            | •     | •      | •            | •            | •      | • | • | • | •            | lacktriangle | •            | •      | •      | •      | •      | •      | •            | •            | •            |

| Designation              | Part No.     | VS 900 | VS 901 |   |   |   |   | VS 930 |   |   | GV 200 | _ | GV 210 |              | GV 220 |              | GV 240       | _            | GV 280S      |
|--------------------------|--------------|--------|--------|---|---|---|---|--------|---|---|--------|---|--------|--------------|--------|--------------|--------------|--------------|--------------|
| Tape Tension Meter       | 75987-262.74 | •      | •      | • | • | • | • | •      | • | ) | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Adjustment Plate         | 75987-262.76 | •      | •      | • | • | • | • | •      |   | ) | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Adjustment Screwdriver   | 75987-262.80 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Height Gauge             | 75987-262.87 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Height Dial Gauge        | 75987-262.75 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | lacktriangle | •      | •            | lacktriangle | •            | lacktriangle |
| Tension Gauge 0.1N to 1N | 72001-401.00 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Tension Gauge 0.5N to 5N | 72001-403.00 |        |        |   |   |   |   |        | • |   |        |   |        |              |        |              |              | •            | lacktriangle |
| Headwheel Extractor      | 75987-262.96 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            | •            |
| Reference Plate          | 75987-262.86 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | lacktriangle | •      | •            | lacktriangle | •            | lacktriangle |
| Hex Head Wrench 2mm      | 72004-082.00 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            |              |
| Service Adapter 501      | 27505-033.01 |        |        |   |   |   |   |        |   |   |        |   |        |              |        |              |              |              | lacktriangle |
| Service Adapter 502      | 27505-034.01 |        |        |   |   |   |   |        |   |   |        |   |        |              |        |              |              |              |              |
| Service Adapter 503      | 27505-036.01 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | lacktriangle | •      | •            |              |              |              |
| Service Adapter Set      | 72008-453.50 |        |        |   |   |   |   |        |   |   |        |   |        |              |        |              |              |              | lacktriangle |
| Test Cassette            | 9.27540-1016 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | lacktriangle | lacktriangle | lacktriangle | ullet        |
| Test Cassette FM-Sound   | 9.27540-1011 | •      | •      | • | • | • | • | •      |   |   | •      | • | •      | •            | •      | •            | •            | •            | lacktriangle |

| Designation                       | Part No.       | GV 201-1     |
|-----------------------------------|----------------|--------------|
| Test Cassette                     | 9.27540-1011   | •            |
| Test Cassette                     | 9.27540-1016   | •            |
| Adapter                           | 75987-262.73   | lacktriangle |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •            |
| Torquemeter 600gf-cm              | 75987-262.72   | •            |
| Adjustment Screwdriver            | 75987-262.80   | •            |
| Nylon Gloves                      | com. available | •            |
| Tentelometer                      | com. available | •            |
| Headwheel Extractor               | 75988-002.37   | •            |

Video

3.46 Grundig Service

# Measuring and Adjustment Equipment/Aids for Video Recorders (Part 2)

| Designation                       | Part No.       | GV 400 | GV 400 GB | GV 400 OST | GV 400 VPS | V 401 VP | V 402 | V 404 S\     | V 405 | GV 406 EURO  | GV 409 M * | V 410        | <b>GV 410 VPS</b> | ۷ 41 | <b>GV 411 OST</b> | GV 411-1     | V 41 | GV 412 | GV 414 SV | 15         | V 416 |
|-----------------------------------|----------------|--------|-----------|------------|------------|----------|-------|--------------|-------|--------------|------------|--------------|-------------------|------|-------------------|--------------|------|--------|-----------|------------|-------|
| Test Cassette                     | 9.27540-1011   | •      | •         | •          | •          | •        | •     | •            | •     | •            | 1          | •            | •                 | •    | •                 | •            | •    | •      | •         | •          | •     |
| Test Cassette                     | 9.27540-1016   | •      | •         | •          | •          | •        | •     | •            | •     | •            | -          | •            | •                 | •    | •                 | •            | •    | •      | •         | •          |       |
| Adapter                           | 75987-262.73   | •      | •         | •          | •          | •        | •     | •            | •     | lacktriangle | -          | lacktriangle | •                 | •    | •                 | •            | •    | •      | •         | •          | •     |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •      | •         | •          | •          | •        | •     | •            | •     | •            | -          | •            | •                 | •    | •                 | •            | •    | •      | •         | lacksquare |       |
| Torquemeter 600gf-cm              | 75987-262.72   | •      | •         | •          | •          | •        | •     | •            | •     | lacktriangle | -          | lacktriangle | •                 | •    | •                 | •            | •    | •      | •         | •          | •     |
| Adjustment Screwdriver            | 75987-262.80   | •      | •         | •          | •          | •        | •     | •            | •     | •            | -          | •            | •                 | •    | •                 | •            | •    | •      | •         | lacksquare |       |
| Nylon Gloves                      | com. available | •      | •         | •          | •          | •        | •     | •            | •     | lacktriangle | -          | lacktriangle | •                 | •    | •                 | •            | •    | •      | •         | •          | •     |
| Tentelometer                      | com. available | •      | •         | •          | •          | •        | •     | •            | •     | lacktriangle | -          | •            | •                 | •    | •                 | •            | •    | •      | •         | lacksquare |       |
| Headwheel Extractor               | 75988-002.37   | •      | •         | •          | •          |          | •     | lacktriangle | •     | •            | -          | •            | lacktriangle      | •    | lacktriangle      | lacktriangle | •    | •      | •         | •          | ullet |

| Designation                       | Part No.       | GV 420 VPT | GV 430       | GV 430 GB | GV 430 VPS | V 434 | V 440        | >     | V 450        | >            | V 450 N | GV 450 VPT | GV 460 NIC | GV 460 VPT | GV 464 HiFi | GV 464 NIC | GV 465 EURO | V 469 I | 20           | GV 470 S |
|-----------------------------------|----------------|------------|--------------|-----------|------------|-------|--------------|-------|--------------|--------------|---------|------------|------------|------------|-------------|------------|-------------|---------|--------------|----------|
| Test Cassette                     | 9.27540-1011   | •          | •            | •         | •          | •     | •            | •     | •            | •            | •       | •          | •          | •          | •           | •          | •           | -       | •            | •        |
| Test Cassette                     | 9.27540-1016   | •          | •            | •         | •          | •     | •            | •     | •            | •            | •       | •          | •          | •          | •           | •          | •           | -       | •            |          |
| Adapter                           | 75987-262.73   | •          | •            | •         | •          | •     | lacktriangle | •     | lacktriangle | lacktriangle | •       | •          | •          | •          | •           | •          | •           | -       | lacktriangle | •        |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •          | •            | •         | •          | •     | lacktriangle | •     | •            | •            | •       | •          | •          | •          | •           | •          | •           | -       | •            |          |
| Torquemeter 600gf-cm              | 75987-262.72   | •          | •            | •         | •          | •     | lacktriangle | •     | •            | lacktriangle | •       | •          | •          | •          | •           | •          | •           | -       | lacktriangle | •        |
| Adjustment Screwdriver            | 75987-262.80   | •          | •            | •         | •          | •     | lacktriangle | •     | •            | •            | •       | •          | •          | •          | •           | •          | •           | -       | •            |          |
| Nylon Gloves                      | com. available | •          | •            | •         | •          | •     | lacktriangle | •     | •            | lacktriangle | •       | •          | •          | •          | •           | •          | •           | -       | lacktriangle | •        |
| Tentelometer                      | com. available | •          | •            | •         | •          | •     | lacktriangle | •     | •            | •            | •       | •          | •          | •          | •           | •          | •           | -       | •            |          |
| Headwheel Extractor               | 75988-002.37   |            | lacktriangle | •         | •          | •     | lacktriangle | ullet | lacktriangle | lacktriangle | •       | •          | •          | •          | •           | •          | •           | -       | lacktriangle | ullet    |

| Designation                       | Part No.       | 4000 / | V 4010 | GV 4092 SV   | GV 4092 VPS  | GV 4192 SV | GV 4200 Sv-VPT | GV 4592 VPT  | MV 4005 | MV 4105      | SE 4100 VPS  | E 4104 | 4120 |   |
|-----------------------------------|----------------|--------|--------|--------------|--------------|------------|----------------|--------------|---------|--------------|--------------|--------|------|---|
| Test Cassette                     | 9.27540-1011   | •      | •      | $\bullet$    | •            | •          | •              | •            | •       | •            | •            | •      | •    | ı |
| Test Cassette                     | 9.27540-1016   | •      | •      | lacktriangle | •            | •          | •              | lacktriangle | •       | •            |              | •      | •    | i |
| Adapter                           | 75987-262.73   | •      | ullet  | lacktriangle | lacktriangle | •          | •              | lacktriangle | •       | lacktriangle | lacktriangle | •      | •    | i |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •      | •      | •            | •            | •          | •              | •            | •       | •            |              | •      | •    | i |
| Torquemeter 600gf-cm              | 75987-262.72   | •      | •      | lacktriangle | •            | •          | •              | •            | •       | •            | •            | •      | •    | i |
| Adjustment Screwdriver            | 75987-262.80   | •      | •      | •            | •            | •          | •              | •            | •       | •            |              | •      | •    | 1 |
| Nylon Gloves                      | com. available | •      | •      | •            | •            | •          | •              | •            | •       | •            | •            | •      | •    | i |
| Tentelometer                      | com. available | •      | •      | •            | •            | •          | •              | •            | •       | •            |              | •      | •    | ı |
| Headwheel Extractor               | 75988-002.37   | •      | •      | •            | •            | •          | •              | •            | •       | •            | •            | •      | •    | i |

<sup>\*</sup> see Service Manual page 1-2

Video

# Measuring and Adjustment Equipment/Aids for Video Recorders (Part 3)

| Designation                       | Part No.       | V 500 ( |   | > | V 501 | GV 505 EURO | V 506 | GV 509 M * |   | GV 511 |   |   |   | GV 535 EURO | V 540 | GV 540 HIFI | > | V 545 | GV 560 HIFI | GV 560 HIFI /5 | GV 560HIFI LE | Ĭ | GV 565 EURO |  |
|-----------------------------------|----------------|---------|---|---|-------|-------------|-------|------------|---|--------|---|---|---|-------------|-------|-------------|---|-------|-------------|----------------|---------------|---|-------------|--|
| Test Cassette                     | 9.27540-1011   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | •           |  |
| Test Cassette                     | 9.27540-1016   |         | • | • |       | •           |       | -          | • | •      | • |   |   |             |       | •           | • |       |             |                |               | • |             |  |
| Adapter                           | 75987-262.73   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | lacksquare  |  |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | •           |  |
| Torquemeter 600gf-cm              | 75987-262.72   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | •           |  |
| Adjustment Screwdriver            | 75987-262.80   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • |             |  |
| Nylon Gloves                      | com. available | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | lacksquare  |  |
| Tentelometer                      | com. available | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • |             |  |
| Headwheel Extractor               | 75988-002.37   | •       | • | • | •     | •           | •     | -          | • | •      | • | • | • | •           | •     | •           | • | •     | •           | •              | •             | • | •           |  |

| Designation                       | Part No.       | GV 5000 | GV 5000 EURO | V 5000 | V 5000 SA |   | GV 5000 VPS /5 | VΡ | GV 5003 | GV 5008 SV |   | > | GV 5050 SV /1 |   | GV 5095 SV | GV 5095 SV /1 |   | GV 5300 VPS | VPS | GV 5305 EURO | GV 5395 SV | GV 5395 SV /1 | GV 5400 EURO | GV 5400 HiFi | GV 5400 NIC | GV 5695 HiFi |
|-----------------------------------|----------------|---------|--------------|--------|-----------|---|----------------|----|---------|------------|---|---|---------------|---|------------|---------------|---|-------------|-----|--------------|------------|---------------|--------------|--------------|-------------|--------------|
| Test Cassette                     | 9.27540-1011   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           | •            |
| Test Cassette                     | 9.27540-1016   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           |              |
| Adapter                           | 75987-262.73   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           | •            |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           |              |
| Torquemeter 600gf-cm              | 75987-262.72   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           | •            |
| Adjustment Screwdriver            | 75987-262.80   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           |              |
| Nylon Gloves                      | com. available | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           | •            |
| Tentelometer                      | com. available | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             |   | •           | •   | •            | •          | •             | •            | •            | •           |              |
| Headwheel Extractor               | 75988-002.37   | •       | •            | •      | •         | • | •              | •  | •       | •          | • | • | •             | • | •          | •             | • | •           | •   | •            | •          | •             | •            | •            | •           | •            |

| •                                 |                | /5                       | VPS /5<br>VPS /5         | SV<br>SV<br>HIFI                        |
|-----------------------------------|----------------|--------------------------|--------------------------|---|
| Designation                       | Part No.       | GV 25 SV /<br>GV 45 SV / | KV 5001 VP<br>KV 5301 VP | SE 5102 SV<br>SE 5104 SV<br>SE 5106 HIF |
| Test Cassette                     | 9.27540-1011   | • •                      | • •                      | • • •                                   |
| Test Cassette                     | 9.27540-1016   | • •                      |                          | • • •                                   |
| Adapter                           | 75987-262.73   | • •                      | ullet                    | $\bullet$                               |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | • •                      |                          | • • •                                   |
| Torquemeter 600gf-cm              | 75987-262.72   | • •                      | • •                      | $\bullet$                               |
| Adjustment Screwdriver            | 75987-262.80   | • •                      |                          | • • •                                   |
| Nylon Gloves                      | com. available | • •                      | • •                      | $\bullet$                               |
| Tentelometer                      | com. available | • •                      |                          | • • •                                   |
| Headwheel Extractor               | 75988-002.37   | • •                      | • •                      | $\bullet$                               |

<sup>\*</sup> see Service Manual page 1-2

Video

3.48 Grundig Service

# Measuring and Adjustment Equipment/Aids for Video Recorders (Part 4)

| Designation                       | Part No.       | CV 600 SV | GV 600 SV/1 | V 605 | €V 609 M * | V 630 | V 630 | / 635 | / 640 | / 640 | V 645 | GV 650 HIFI | / 660 | GV 660 NIC | GV 665 EURO | GV 670 S NIC | V 670 | S 069 A | GV 690 S NIC |
|-----------------------------------|----------------|-----------|-------------|-------|------------|-------|-------|-------|-------|-------|-------|-------------|-------|------------|-------------|--------------|-------|---------|--------------|
| Test Cassette                     | 9.27540-1011   | •         | •           | •     | 1          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       | •            |
| Test Cassette                     | 9.27540-1016   |           | •           | •     | -          | •     |       | •     |       |       | •     | •           | •     | •          | •           | •            | •     | •       |              |
| Adapter                           | 75987-262.73   | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       | •            |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       |              |
| Torquemeter 600gf-cm              | 75987-262.72   | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       | •            |
| Adjustment Screwdriver            | 75987-262.80   | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       |              |
| Nylon Gloves                      | com. available | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       | •            |
| Tentelometer                      | com. available | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       |              |
| Headwheel Extractor               | 75988-002.37   | •         | •           | •     | -          | •     | •     | •     | •     | •     | •     | •           | •     | •          | •           | •            | •     | •       |              |
| S-VHS Adapter Card                | 75988-039.55   | -         | -           | -     | -          | -     | -     | -     | -     | -     | -     | -           | -     | -          | -           | •            | •     | •       |              |
| S-VHS Adapter Cable               | 75988-039.54   | -         | -           | -     | -          | -     | -     | -     | -     | -     | -     | -           | -     | -          | -           | •            | •     | •       | •            |

| Designation                       | Part No.       | GV 6000 EURO | V 6000 | >I. | V 6001 | V 6066 | GV 6096 SV/1 | V 6300 | V 6300 | V 6300 | GV 6396 VPT | V 6400 | V 6400 HIFI | GV 6400 HIFI/5 | V 6400 NI | 1 | V 6596 | GV 6596 NIC |
|-----------------------------------|----------------|--------------|--------|-----|--------|--------|--------------|--------|--------|--------|-------------|--------|-------------|----------------|-----------|---|--------|-------------|
| Test Cassette                     | 9.27540-1011   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Test Cassette                     | 9.27540-1016   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Adapter                           | 75987-262.73   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Torquemeter 600gf-cm              | 75987-262.72   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Adjustment Screwdriver            | 75987-262.80   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Nylon Gloves                      | com. available | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |
| Tentelometer                      | com. available | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • |        | •           |
| Headwheel Extractor               | 75988-002.37   | •            | •      | •   | •      | •      | •            | •      | •      | •      | •           | •      | •           | •              | •         | • | •      | •           |

Video

| Designation                       | Part No.       | GVP 600 ICN EURO |   | GV 26 | GV 26 EURO | GV 26 VPS | > | GV 46 VPS | SE 6102 SV | SE 6104 VPT | SE 6106 HiFi |
|-----------------------------------|----------------|------------------|---|-------|------------|-----------|---|-----------|------------|-------------|--------------|
| Test Cassette                     | 9.27540-1011   | •                | ľ | •     | •          | •         | • | •         | •          | •           | •            |
| Test Cassette                     | 9.27540-1016   | •                |   | •     | •          | •         | • | •         | •          | •           |              |
| Adapter                           | 75987-262.73   | •                |   | •     | •          | •         | • | •         | •          | •           | •            |
| Tape Tension Adjustm't Handle+Pin | 75988-002.27   | •                | l | •     | •          | •         | • | •         | •          | •           |              |
| Torquemeter 600gf-cm              | 75987-262.72   | •                |   | •     | •          | •         | • | •         | •          | •           | •            |
| Adjustment Screwdriver            | 75987-262.80   |                  |   | •     | •          |           | • | •         | •          | •           |              |
| Nylon Gloves                      | com. available | •                |   | •     | •          | •         | • | •         | •          | •           | •            |
| Tentelometer                      | com. available |                  |   | •     | •          | •         | • | •         | •          | •           |              |

<sup>\*</sup> see Service Manual page 1-2

# Partners help each other

Please help us find hidden faults and return all modules with a brief description of the fault.

For this purpose, a green fault tag or white adhesive label is enclosed with all modules (insert cards) delivered by the GRUNDIG service organisation.

| <b></b>   | Fehleranhänger für Module / Label tag for modules<br>Cartellino dei diffeti per i moduli / Fiche suiveuse pour module<br>Etiqueta de avería bara módulos   |
|---|--|
| ET TT ET SO S S S S S S S S S S S S S S S S S S                                     | Fehler tritt sofort auf / Fault aoccurs immediately / Il difetto compare subito Le défaut apparaît immédiatement / La avería aparece inmediatamente  |
| BET<br>FAU<br>SZO<br>IND<br>TUE   | Fehler tritt nur zeitweise auf / Fault aoccurs intermittently / II difetto compare solo a periodi / Le défaut est intermittent / La avería aparece intermitentemente   |
| R RÜCKA<br>RUCKA<br>TURNING<br>MODULES<br>RE AL PE,<br>ANDATO<br>OURRNE!<br>E DEFEC | Fehler tritt nach ca. Minuten aut Fault occurs after approx minutes Il difetto compare dopo ca. minuti Le défaut apparaî aprés environ minutes de fonctionnement La avería aparece tras minutos                |
| FÜR IHF<br>FOR RET<br>ALLEGAR<br>VIENE RIM<br>POUR RET<br>MODUL<br>PARA D           | Wackelkontakt / intermittent contact / Contatto difettoso Mauvais contact intermittent / contacto intermitente Sonstige Fehlererscheinungen: / Other faults: / Altri difetti: Autres défauts: / Otras averías: |
|   |  |

Bitte unterstützen Sie uns beim Auffinden versteckter Fehler: Versehen Sie alle Modul-Rückläufer mit vollständig ausgefüllten Fehleranhängern! Please help us to trace obscure faults: Ensure all modules are returned with label tag completed!

Collaborate con noi nella ricera deidifetti: corredate ogni modulo che rimandate indietro dei cartellino dei diffetti compilato in tutti i suoi punti!

Afin de nous permettre d'améliorer la Qualité de notre service, nous vous prions de nous renvoyer avec votre module, cette étiquette dûment renseignée. Merci pour votre collaboration.

Ayúdennos a encontrar las averías ocultas: procuren que cada módulo devuelto vaya con su etiqueta de avería para módulos debidamente relienda!

Thank you very much for your kind assistance.

3.50

# **Contents: Camcorders**

| Modulators and Power Supply Units for Camcorders                 | 4.2  |
|--|------|
| Accumulators for Camcorders                                      |      |
| Back-up Batteries and Remote Control Transmitters for Camcorders |      |
| Sockets and Filter Threads of Camcorders                         | 4.8  |
| Camcorder Service Manuals  | 4.10 |

Camcorder

# **Modulators and Power Supply Units of Camcorders (Part 1)**

| Camcorder | Modulator       | Part No.     | Power Supply | Part No.     |
|-----------|-----------------|--------------|--------------|--------------|
| VS-C 20   |                 |              | NA 50        | 75987-430.04 |
| VS-C 30   |                 |              | NA 50        | 75987-430.04 |
| VS-C 35   | M 45            | 75987-482.82 | NA 75 A      | 75987-579.70 |
| VS-C 40   | M 60            | 75987-457.06 | NA 60        | 75987-457.03 |
| VS-C 45   | M 45            | 75987-482.82 | NA 80        | 75987-513.09 |
| VS-C 46   | M 45            | 75987-482.82 | NA 75        | 75987-550.60 |
| VS-C 50   | M 50            | 75987-430.05 | NA 50        | 75987-430.04 |
| VS-C 55   | M 45            | 75987-482.82 | NA 75        | 75987-550.60 |
| VS-C 60   | M 60            | 75987-457.06 | NA 60        | 75987-457.03 |
| VS-C 70   | M 60            | 75987-457.06 | NA 80        | 75987-513.09 |
| S-VS-C 75 | M 45            | 75987-482.82 | NA 75        | 75987-550.60 |
| S-VS-C 80 | M 60            | 75987-457.06 | NA 80        | 75987-513.09 |
| S-VS-C 85 | M 45            | 75987-482.82 | NA 80        | 75987-513.09 |
| VS 120    | in Tuner/Timer  | 13901-402.02 |              |              |
|           |                 |              | NA 120       | 75987-331.91 |
| VS 150    | M 150           | 75987-357.07 | NA 150       | 75987-356.38 |
| VS 160    | in Power Supply |              | NA 160       | 75987-249.72 |
| VS 170    | in Power Supply |              | NA 170       | 75907-710.51 |
| S-VS 180  | in Power Supply |              | NA 170       | 75907-710.51 |
| VS 4-8    | in VS 4-8       |              | NA 8         | 75987-527.88 |
| VS 8000   | M 8             | 75987-527.89 | NA 8         | 75987-527.88 |
| VS 8100   | M 81            | 75987-553.11 | NA 8-1       | 75987-553.10 |
| VS 8150   | M 81            | 75987-553.11 | NA 8-1 A     | 75987-580.40 |
| VS 8250   | M 81            | 75987-553.11 | NA 8-2       | 75987-580.14 |
| VS 8300   | M 8             | 75987-527.89 | NA 8         | 75987-527.88 |
| VS 8320   | M 81            | 75987-553.11 | NA 8         | 75987-527.88 |
| VS 8500   | M 81            | 75987-553.11 | NA 8         | 75987-527.88 |
| VS 8800   | M 81            | 75987-553.11 | NA 8-1       | 75987-553.10 |
| LC 125C   | M 45            | 75987-482.82 | NA 75        | 75987-550.60 |
| LC 145E   | M 81            | 75987-553.11 | NA 8         | 75987-527.88 |
| LC 175HE  | M 81            | 75987-553.11 | NA 8-1 A     | 75987-580.40 |
| LC 180HE  | M 81            | 75987-553.11 | NA 8         | 75987-527.88 |
| LC 210C   | M 45            | 75987-482.82 | NA 75 B      | 75981-277.98 |
| LC 215C   | M 45            | 75987-482.82 | NA 75 B      | 75981-277.98 |
| LC 225C   | M 45            | 75987-482.82 | NA 75 B      | 75981-277.98 |
| LC 230E   | M 81            | 75987-553.11 | NA 8-2       | 75987-580.14 |
| LC 232E   | M 81            | 75987-553.11 | NA 8-1       | 75987-553.10 |
| LC 235E   | M 81            | 75987-553.11 | NA 8-1       | 75987-553.10 |
| LC 240E   | M 81            | 75987-553.11 | NA 8-3       | 75981-281.51 |
| LC 255SC  | M 45            | 75987-482.82 | NA 75 A      | 75987-579.70 |
| LC 280HE  | M 81            | 75987-553.11 | NA 8-4       | 75981-293.40 |
| LC 285HE  | M 81            | 75987-553.11 | NA 8         | 75987-527.88 |
| LC 290N   | M 45            | 75987-482.82 | NA 190 A     | 75981-281.30 |
| LC 295SN  | M 45            | 75987-482.82 | NA 190 A     | 75981-281.30 |
| LC 310C   | M 45            | 75987-482.82 | NA 190 A     | 75981-295.96 |
| LC 320C   | M 45            | 75987-482.82 | NA 90        | 75981-295.96 |
| LC 320C   | M 81            | 75987-462.62 |              | 75981-281.51 |
| LC 335E   |                 | 75987-553.11 | NA 8-3       | 75981-281.51 |
|           | M 81            |              | NA 8-3       |              |
| LC 345E   | M 81            | 75987-553.11 | NA 8-3       | 75981-281.51 |
| LC 355SC  | M 45            | 75987-482.82 | NA 90        | 75981-304.27 |
| LC 360SC  | M 45            | 75987-482.82 | NA 85        | 75981-295.96 |
| LC 375HE  | M 81            | 75987-553.11 | NA 8-1       | 75987-553.10 |
| LC 380HE  | M 81            | 75987-553.11 | NA 8-4       | 75981-293.40 |

Camcorder

4.2 Grundig Service

# **Modulators and Power Supply Units of Camcorders (Part 2)**

| Camcorder | Modulator | Part No.     | Power Supply | Part No.     |
|-----------|-----------|--------------|--------------|--------------|
| LC 400C   | M 45      | 75987-482.82 | NA 95        | 75981-320.27 |
| LC 410C   | M 45      | 75987-482.82 | NA 95        | 75981-320.27 |
| LC 435E   | M 81      | 75987-553.11 | NA 8-3 *     | 75981-281.51 |
| LC 445E   | M 81      | 75987-553.11 | NA 8-3 *     | 75981-281.51 |
| LC 450SC  | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 460SC  | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 475HE  | M 81      | 75987-553.11 | NA 8-3 *     | 75981-281.51 |
| LC 485HE  | M 81      | 75987-553.11 | NA 8-1       | 75987-553.10 |
| LC 500C   | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 535E   | M 81      | 75987-553.11 | NA-L 1       | 75981-335.12 |
| LC 550SC  | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 560SC  | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 575E   | M 81      | 75987-553.11 | NA-L 1       | 75981-335.12 |
| LC 600C   | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 610C   | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 635E   | M 81      | 75987-553.11 | NA 8-5       | 75981-345.06 |
| LC 645E   | M 81      | 75987-553.11 | NA 8-5       | 75981-345.06 |
| LC 650SC  |           |              | NA 96        | 75981-332.64 |
| LC 675HE  | M 81      | 75987-553.11 | NA 8-6       | 75981-353.48 |
| LC 685HE  | M 81      | 75987-553.11 | NA 8-6       | 75981-353.48 |
| LC 695SN  | M 45      | 75987-482.82 | NA 190B      | 75981-348.90 |
| LC 700C   | M 45      | 75987-482.82 | NA 96        | 75981-332.64 |
| LC 735E   | M 81      | 75987-553.11 | NA 8-7       | 75981-355.04 |
| LC 750SC  |           |              | NA 96        | 75981-332.64 |
| LC 760SC  |           |              | NA 96        | 75981-332.64 |
| LC 775HE  | M 81      | 75987-553.11 | NA 8-72      | 75981-354.64 |
| LC 785HE  | M 81      | 75987-553.11 | NA 8-71      | 75981-354.02 |
| LC-D 80E  | M 81      | 75987-553.11 | NA-L 1       | 75981-335.12 |
| LC-D 100E | M 81      | 75987-553.11 | NA-L 2       | 75981-338.07 |
| DLC 1     | **        | **           | **           | **           |

<sup>\*</sup> is optionally replaced by NA-L 1



Grundig Service 4.3

<sup>\*\*</sup> data not yet available on editorial close

# **Accumulators for Camcorders (Part 1)**

| Camcorder          | Stand. Acc.**    | Data                       | Part No.                     | Optional 2nd Accumulator  |
|--------------------|------------------|----------------------------|------------------------------|---|
| VS-C 20            | BP 20            | 9.6V/450mAh                | 75987-447.08                 | BP 21, BP 60, BP 80   |
| VS-C 30            | BP 20            | 9.6V/450mAh                | 75987-447.08                 | BP 21, BP 60, BP 80   |
| VS-C 35            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| VS-C 40            | BP 60            | 9.6V/1100mAh               | 75987-457.02                 | BP 21, BP 60, BP 80   |
| VS-C 45            | BP 60            | 9.6V/1100mAh               | 75987-457.02                 | BP 21, BP 60, BP 80   |
| VS-C 46            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| VS-C 50            | BP 51            | 9.6V/1100mAh               | 75987-430.07                 | BP 21, BP 51, BP 52, BP 60, BP 80                                     |
| VS-C 55            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| VS-C 60            | BP 60            | 9.6V/1100mAh               | 75987-457.02                 | BP 21, BP 60, BP 80   |
| VS-C 70            | BP 60            | 9.6V/1100mAh               | 75987-457.02                 | BP 21, BP 60, BP 80   |
| S-VS-C 75          | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| S-VS-C 80          | BP 80            | 9.6V/1400mAh               | 75987-513.07                 | BP 21, BP 60, BP 80   |
| S-VS-C 85          | BP 80            | 9.6V/1400mAh               | 75987-513.07                 | BP 21, BP 60, BP 80   |
| VS 120             | BP 121           | 12V/1000mAh                | Ersatz BP 122                | BP 121, BP 122, BP 123  |
| VS 150             | BP 151           | 12V/800mAh                 | 75987-356.60                 | BP 151, BP 152  |
| VS 160             | BP 122           | 12V/2000mAh                | 75987-331.92                 | BP 121, BP 122, BP 123  |
| VS 170<br>S-VS 180 | BP 122<br>BP 122 | 12V/2000mAh<br>12V/2000mAh | 75987-331.92<br>75987-331.92 | BP 121, BP 122, BP 123<br>BP 121, BP 122, BP 123                      |
| VS 4-8             | BP 122           | 6V/1000mAh                 | 75987-331.92                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8000            | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8100            | BP 8-4           | 6V/1400mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8150            | BP 8-4           | 6V/1400mAh                 | 75987-553.22                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8250            | BP 8-4           | 6V/1400m/th                | 75987-553.22                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8300            | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8320            | BP 8-1           | 6V/1000m/th                | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8500            | BP 8-2           | 6V/2000mAh                 | 75987-525.83                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| VS 8800            | BP 8-5           | 6V/1800mAh                 | Ersatz BP 8-3                | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 125C            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 145E            | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 175HE           | BP 8-5           | 6V/1800mAh                 | Ersatz BP 8-3                | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 180HE           | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 210C            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 215C            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 225C            | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 230E            | BP 8-4           | 6V/1400mAh                 | 75987-553.22                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 232E            | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 235E            | BP 8-6           | 6V/1200mAh                 | 75981-283.95                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 240E            | BP 8-6           | 6V/1200mAh                 | 75981-283.95                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 255SC           | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 280HE           | BPL 8-7          | 7.2V/1000mAh               | 75981-291.78                 | BPL 8-4, BPL 8-7  |
| LC 285HE           | BP 8-6           | 6V/1200mAh                 | 75981-283.95                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 290N            | BP 124           | 12V/2000mAh                | 75913-210.00                 | BP 124  |
| LC 295SN           | BP 124<br>BP 65  | 12V/2000mAh                | 75913-210.00                 | BP 124  |
| LC 310C            |                  | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70  |
| LC 320C<br>LC 330E | BP 75<br>BP 8-1  | 4.8V/1300mAh<br>6V/1000mAh | 75981-304.26                 | BP 74, BP 75, BP 85<br>BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 335E            | BP 8-1           | 6V/1000mAh                 | 75987-527.90<br>75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 345E            | BP 8-1           | 6V/1000mAh                 | 75987-527.90                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 355SC           | BP 75            | 4.8V/1300mAh               | 75981-304.26                 | BP 74, BP 75, BP 85   |
| LC 360SC           | BP 65            | 6V/1200mAh                 | 75987-568.87                 | BP 65, BP 70 *  |
| LC 375HE           | BP 8-6           | 6V/1200mAh                 | 75981-283.95                 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6                        |
| LC 380HE           | BPL 8-7          | 7.2V/1000mAh               | 75981-291.78                 | BPL 8-4, BPL 8-7  |
|                    | 2. 20 1          |                            | . 000 . 201110               |   |
| Extra accessor     | v: BP 8-3        | 6V/2400mAh                 | 75909-310.00                 |   |
| Extra accessor     | •                | 9.6V/1400mAh               | 75987-430.12                 |   |
| Extra accessor     |                  | 6V/2400mAh                 | 75909-610.00                 |   |
| Extra accessor     |                  | 4.8V/2600mAh               | 75913-510.00                 |   |
| Extra accessor     | •                | 12V/2300mAh                | 75909-710.00                 |   |
| Eytra accessor     | ,                | 7.2\//1200mAh              | 75001 201 70                 |   |

75981-291.78

7.2V/1200mAh

Extra accessory: BPL 8-4

Camcorder

> Grundig Service 4.4

 $<sup>^{\</sup>star}$  When using the BP 70 accumulator the battery compartment of LC 360SC cannot be closed completely.  $^{\star\star}$  Standard Accessory

# **Accumulators for Camcorders (Part 2)**

| Camcorder       | Stand. Acc.* | Data         | Part No.     | Optional 2nd Accumulator                       |
|-----------------|--------------|--------------|--------------|--|
| LC 400C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 410C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 435E         | BP 8-1       | 6V/1000mAh   | 75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 445E         | BP 8-1       | 6V/1000mAh   | 75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 450SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 460SC        | BP 75        | 4,8V/1300mAh | 75981-304.26 | BP 74, BP 75, BP 85                            |
| LC 475HE        | BP 8-1       | 6V/1000mAh   | 75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 485HE        | BP 8-6       | 6V/1200mAh   | 75981-283.95 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 500C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 535E         | BP 8-1       | 6V/1000mAh   | 75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 550SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 560SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 575E         | BP 8-1       | 6V/1000mAh   | 75987-527.90 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 600C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 610C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 635E         | BP 8-8       | 6V/800mAh    | 75981-352.50 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 645E         | BP 8-8       | 6V/800mAh    | 75981-352.50 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 650SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 675HE        | BPL 8-8      | 7,2V/1350mAh | 75981-353.49 | BPL 8-8  |
| LC 685HE        | BPL 8-8      | 7,2V/1350mAh | 75981-353.49 | BPL 8-8  |
| LC 695SN        | BP 124       | 12V/2000mAh  | 75913-210.00 | BP 124   |
| LC 700C         | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 735E         | BP 8-8       | 6V/800mAh    | 75981-352.50 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC 750SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 760SC        | BP 74        | 4,8V/1200mAh | 75981-320.26 | BP 74, BP 75, BP 85                            |
| LC 775HE        | BPL 8-10     | 7,2V/ ** mAh | 75981-354.65 | BPL 8-10                                       |
| LC 785HE        | BPL 8-8      | 7,2V/1350mAh | 75981-353.49 | BPL 8-8  |
| LC-D 80E        | BP 8-4       | 6V/1400mAh   | 75987-553.22 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| LC-D 100E       | BP 8-4       | 6V/1400mAh   | 75987-553.22 | BP 8-1, BP 8-2, BP 8-3, BP 8-4, BP 8-5, BP 8-6 |
| DLC 1           | **           | **           | **           | **   |
| <i></i>         | DD 0 0       | 0)//0400 4:  | 75000 040 00 |  |
| Extra accessory | 7: BP 8-3    | 6V/2400mAh   | 75909-310.00 |  |

| Extra accessory: BP 8-3  | 6V/2400mAh   | 75909-310.00 |
|--------------------------|--------------|--------------|
| Extra accessory: BP 52   | 9,6V/1400mAh | 75987-430.12 |
| Extra accessory: BP 70   | 6V/2400mAh   | 75909-610.00 |
| Extra accessory: BP 85   | 4,8V/2600mAh | 75913-510.00 |
| Extra accessory: BP 123  | 12V/2300mAh  | 75909-710.00 |
| Extra accessory: BPL 8-4 | 7.2V/1200mAh | 75981-291.78 |

Camcorder

Grundig Service 4.5

<sup>\*</sup> Standard Accessory
\*\* Data not yet available on editorial close

# **Back-up Batteries and Remote Control Transmitters** for Camcorders (Part 1)

| Camcorder | Back-up Battery    | RC Transmitter | Part No.     | Transmitter Battery |
|-----------|--------------------|----------------|--------------|---------------------|
| VS-C 20   | -                  |                |              |                     |
| VS-C 30   | -<br>OD 0000       | -              | -            | -                   |
| VS-C 35   | CR 2032            | -              | -            | -                   |
| VS-C 40   | LR 1130            | -              | -            | -                   |
| VS-C 45   | LR 1130            | -              | -            | -                   |
| VS-C 46   | CR 2032            | -              | -            | -                   |
| VS-C 50   | -                  | -              | -            | -                   |
| VS-C 55   | CR2032             | -              | -            | -                   |
| VS-C 60   | LR 1130            | -              | -            | -                   |
| VS-C 70   | LR 1130            | -              | -            | -                   |
| S-VS-C 75 | CR 2032            | -              | -            | -                   |
| S-VS-C 80 | LR 1130            | -              | -            | -                   |
| S-VS-C 85 | CR 2032            | -              | -            | -                   |
| VS 150    |                    | -              | -            | -                   |
| VS 160    | 3 x Micro (AAA)    | -              | -            | -                   |
| VS 170    | LR 1130            | -              | -            | -                   |
| S-VS 180  | LR 1130            | -              | -            | -                   |
| VS 8000   | CR 2025            | -              | -            | -                   |
| VS 8100   | CR 2025            |                | -            | -                   |
| VS 8150   | CR 2025            | RC 8-2         | 75987-580.02 | 2 x Mignon          |
| VS 8250   | CR 2025            | RC 8-2         | 75987-580.02 | 2 x Mignon          |
| VS 8300   | CR 2025            | -              | -            | -                   |
| VS 8320   | CR 2025            | -              | -            | -                   |
| VS 8500   | CR 2025            | -              | -            | -                   |
| VS 8800   | CR 2025            | RC 8-1         | 75987-559.02 | 2 x Mignon          |
| LC 125C   | CR 2032            | -              | -            | -                   |
| LC 145E   | CR 2025            | RC 8-4         | 75981-273.01 | 2 x Mignon          |
| LC 175HE  | CR 2025            | RC 8-3         | 75987-585.07 | 2 x Mignon          |
| LC 180HE  | CR 2025            | RC 8-5         | 75981-271.19 | 2 x Mignon          |
| LC 210C   | CR 2032            | -              | -            | -                   |
| LC 215C   | CR 2032            | -              | -            | -                   |
| LC 225C   | CR 2032            | -              | -            | -                   |
| LC 230E   | CR 2025            | RC 8-6         | 75987-585.07 | CR 2025             |
| LC 232E   | CR 2025            |                | -            |                     |
| LC 235E   | CR 2025            | RC 8-4         | 75981-273.01 | 2 x Mignon          |
| LC 240E   | CR 2025            | RC 8-7         | 75981-282.15 | 2 x Mignon          |
| LC 255SC  | CR 2032            |                | -            | -                   |
| LC 280HE  | CR 2025            | RC 8-9         | 75981-291.66 | CR 2025             |
| LC 285HE  | CR 2025            | RC 8-8         | 75981-284.10 | CR 2025             |
| LC 290N   | Lithiuim Battery * | -              | -            | -                   |
| LC 295SN  | Lithiuim Battery * | -              | -            | -                   |
| LC 310C   | CR 2032            | -              | -            | -                   |
| LC 320C   | CR 2032            | -              | -            | -                   |
| LC 330E   | CR 2025            | -              | -            | -                   |
| LC 335E   | CR 2025            | RC 8-4         | 75981-273.01 | 2 x Mignon          |
| LC 345E   | CR 2025            | RC 8-4         | 75981-273.01 | 2 x Mignon          |
| LC 355SC  | CR 2032            | -              | -            | -                   |
| LC 360SC  | Lithiuim Battery * |                | -            | -                   |
| LC 375HE  | CR 2025            | RC 8-7         | 75981-282.15 | 2 x Mignon          |
| LC 380HE  | CR 2025            | RC 8-9         | 75981-291.66 | CR 2025             |

<sup>\*</sup> Soldered into the camcorder (part no. 75981-286.62)

Camcorder

4.6 Grundig Service

# **Back-up Batteries and Remote Control Transmitters for Camcorders (Part 2)**

| Camcorder | Back-up Battery   | RC Transmitter | Part No.     | Transmitter Battery |
|-----------|-------------------|----------------|--------------|---------------------|
| LC 400C   | Lithium Battery * | -              | -            | -                   |
| LC 410C   | Lithium Battery * | -              | -            | -                   |
| LC 435E   | CR 2025           | -              | -            | -                   |
| LC 445E   | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC 450SC  | Lithium Battery * | -              | -            | -                   |
| LC 460SC  | Lithium Battery * | -              | -            | -                   |
| LC 475HE  | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC 485HE  | CR 2025           | RC 8-10        | 75981-322.07 | 2 x Mignon          |
| LC 500C   | Lithium Battery * | -              | -            | -                   |
| LC 535E   | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC 550SC  | VL 2020 *         | RC 500         | 75981-342.38 | CR 2025             |
| LC 560SC  | VL 2330 *         | RC 500         | 75981-342.38 | CR 2025             |
| LC 575E   | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC 600C   | VL 2330/1HF *     | -              | -            | -                   |
| LC 610C   | VL 2020/1HF *     | RC 500         | 75981-342.38 | CR 2025             |
| LC 635E   | CR 2025           | -              | -            | -                   |
| LC 645E   | CR 2025           | RC 6E          | 75981-346.04 | 2 x Mignon          |
| LC 650SC  | VL 2330/1HF *     | RC 500         | 75981-342.38 | CR 2025             |
| LC 675HE  | CR 2025           | -              | -            | -                   |
| LC 685HE  | CR 2025           | RC 6HE         | 75981-351.05 | 2 x Mignon          |
| LC 695SN  | VL 2020 *         | -              | -            | -                   |
| LC 700C   | VL 2330/1HF *     | -              | -            | -                   |
| LC 735E   | CR 2025           | RC 6E          | 75981-346.04 | 2 x Mignon          |
| LC 750SC  | * *               | RC 500         | 75981-342.38 | CR 2025             |
| LC 760SC  | * *               | RC 500         | 75981-342.38 | CR 2025             |
| LC 775HE  | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC 785HE  | CR 2025           | RC 6HE         | 75981-351.05 | 2 x Mignon          |
| LC-D 80E  | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| LC-D 100E | CR 2025           | RC 8-11        | 75981-328.05 | 2 x Mignon          |
| DLC 1     | * *               | * *            | * *          | * *                 |

<sup>\*</sup> Soldered into the camcorder



Grundig Service 4.7

<sup>\*\*</sup> Data not yet available on editorial close

### **Sockets and Filter Threads of Camcorders (Part 1)**

| Sockets              | a      | M         | 1 Г    | -11       | te          |              |                | ıe           | a              | ıs         | O           |             | Ja              |               | CC                | ) (                 | Je:          | 13            | (r            | 0 | irt 1)         |
|----------------------|--------|-----------|--------|-----------|-------------|--------------|----------------|--------------|----------------|------------|-------------|-------------|-----------------|---------------|-------------------|---------------------|--------------|---------------|---------------|---|----------------|
|                      | Signal | S-Video   | Video  | Video     | Video       | Audio (Mono) | Audio (Stereo) | Audio (Mono) | Audio (Stereo) | RC (REC)   | RC (REC/PB) | Edit-Bus    | New-Edit-Bus    | Control-L-Bus | Microphone (Mono) | Microphone (Stereo) | Earphones    | VITC          | CHG           |   |                |
| Camcorder<br>VS-C 20 | Socket | · Hosiden | - BNC  | 1 x Cinch | 8-pin Movie | 8-pin Movie  | 8-pin Movie    | 1 x Cinch    | 2 x Cinch      | 2.5mm Jack | 2.5mm Jack  | 5-pin. Edit | 11-pin New-Edit | 2.5mm Jack    | 3.5mm Jack        | · 3.5mm Jack        | . 3.5mm Jack | 10-pin Socket | 10-pin Socket |   | Filter Thread  |
| VS-C 20<br>VS-C 30   |        | -         | -      | -         | -           | -            | -              | -            | -              | -          |             | -           | -               | -             | -                 | -                   | -            | -             | -             | H | 49 mm          |
| VS-C 35              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               | -             | •                 | -                   | •            | -             | -             |   | 43 mm          |
| VS-C 40              |        | -         | -      | -         | •           | •            | -              | -            | -              | -          | •           | -           | -               | -             | •                 | -                   | -            | -             | -             | ı | 49 mm          |
| VS-C 45              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | •           | -           | -               | -             | -                 | -                   | •            | -             | -             | Γ | 49 mm          |
| VS-C 46              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | •           | •           | -               | -             | •                 | -                   | •            | •             | •             |   | 43 mm          |
| VS-C 50              |        | -         | -      | -         | •           | •            | -              | -            | -              | •          | -           | -           | -               | -             | •                 | -                   | •            | -             | -             | L | 49 mm          |
| VS-C 55              |        | -         | -      | •         | -           | -            | -              |              | -              | -          | -           | -           | -               | -             | •                 | -                   | -            | -             | -             | ı | 27 mm          |
| VS-C 60<br>VS-C 70   |        | -         | -      | -         | •           | •            | -              | -            | -              | -          | •           | -           | -               | -             | •                 | -                   | -            | -             | -             | l | 49 mm<br>49 mm |
| S-VS-C 75            |        | •         | -      | •         | -           | -            | -              | -            | -              | -          | •           |             | -               | -             | -                 |                     |              | •             | •             |   | 43 mm          |
| S-VS-C 80            |        | •         | -      | -         | •           | -            | •              | -            | -              | -          | •           | -           | -               | -             | -                 | •                   | •            | -             | •             | ı | 49 mm          |
| S-VS-C 85            |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | •           | •           | -               | -             | -                 | •                   | •            | •             | •             | Г | 49 mm          |
| VS 120               |        | -         | •      | -         | -           | -            | -              | •            | -              | -          | •           | -           | -               | -             | -                 | -                   | -            | -             | -             |   | -              |
| VS 150               |        | -         | -      | -         | •           | •            | -              | -            | -              | •          | -           | -           | -               | -             | •                 | -                   | •            | -             | •             | L | 46 mm          |
| VS 160               |        | -         | •      | -         | -           | -            | -              | •            | -              | •          | -           | -           | -               | -             | •                 | -                   |              | -             | -             |   | 49 mm          |
| VS 170               |        | -         | •      | -         | -           | -            | -              | •            | -              | -          | •           | -           | -               | -             | •                 | -                   | •            | -             | •             | L | 49 mm          |
| S-VS 180<br>VS 4-8   |        | •         | •<br>- | -         | -           | -            | -              | •            | -              | -          | -           | -           | -               | -             | •                 | -                   | 1)           | -             | -             |   | 55 mm          |
| VS 8000              |        | -         | -      | •         | _           | -            | -              | •            | -              | _          | _           | -           | -               | -             | -                 | -                   | •            | _             | _             |   | 46 mm          |
| VS 8100              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               |               | •                 | -                   | •            | -             | -             |   | 46 mm          |
| VS 8150              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               | •             | •                 | -                   | •            | -             | -             | ı | 46 mm          |
| VS 8250              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               | •             | -                 | -                   | •            | -             | -             | Г | 46 mm          |
| VS 8300              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               | •             | •                 | -                   | •            | -             | -             |   | 46 mm          |
| VS 8320              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               | •             | •                 | -                   | -            | -             | -             | L | 37/46 mm       |
| VS 8500              |        | •         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               |               | •                 | -                   | •            | -             | -             |   | 52 mm          |
| VS 8800<br>LC 125C   |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             | L | 46 mm          |
| LC 125C              |        | -         | -      | •         | -           | -            | -              | -            | -              | -          | -           | -           | -               | -             | -                 | •                   | -            | -             | -             |   | 37 mm<br>37 mm |
| LC 175HE             |        | •         | -      | •         | _           | -            | -              | _            | •              | _          | _           | _           | -               | •             | _                 | •                   | •            | _             | _             | l | 46 mm          |
| LC 180HE             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             | ľ | 37 mm          |
| LC 210C              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | •           | -           | -               | -             | •                 | -                   | •            | -             | -             | þ | 49 mm          |
| LC 215C              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | •           | •           | -               | -             | •                 | -                   | •            | -             | •             | Ī | 49 mm          |
| LC 225C              |        | -         | -      | •         | -           | -            | -              | -            | •              | -          | -           | •           | -               | -             | -                 | •                   | -            | -             | -             |   | 37 mm          |
| LC 230E              |        | -         | -      | •         | -           | -            | -              | •            | -              | Ŀ          | -           | -           | -               | •             | -                 | -                   | •            | Ŀ             | -             | ļ | 46 mm          |
| LC 232E<br>LC 235E   |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | -           | -               |               | •                 | -                   |              | -             | -             |   | 37 mm<br>37 mm |
| LC 235E              |        | -         | -      | •         |             |              | -              | -            | •              | -          | -           | -           | -               | •             | •                 | -                   | -            | -             | -             |   | 37 mm          |
| LC 255SC             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | •               | -             | -                 |                     |              | -             | -             | ľ | 37 mm          |
| LC 280HE             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             | ı | 37 mm          |
| LC 285HE             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             | Г | 52 mm          |
| LC 290N              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | •           | •           | -               | -             | •                 | -                   | •            | •             | •             |   | 49 mm          |
| LC 295SN             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | •           | •           | -               | -             | -                 | •                   | 1)           | 2)            | •             | L | 49 mm          |
| LC 310C              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | •           | -               | -             | •                 | -                   | -            | -             | -             |   | 49 mm          |
| LC 320C              |        | -         | -      | •         | -           | -            | -              | •            | -              | -          | -           | •           | -               | -             | •                 | -                   | •            | -             | -             | ŀ | 37 mm          |
| LC 330E<br>LC 335E   |        | -         | -      | •         | -           | -            | -              | -            | -              | -          | -           | -           | -               |               | -                 | -                   | -            | -             | -             | ľ | 37 mm<br>-     |
| LC 335E              |        | -         | -      |           | -           | -            | -              | •            | -              | -          | -           | _           | -               |               | •                 | _                   | -            | -             | _             | ŀ | 37 mm          |
| LC 355SC             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | •               | -             | -                 | •                   | •            | 2)            | -             | ľ | 37 mm          |
| LC 360SC             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | •               | -             | -                 | •                   | -            | -             | -             | þ | 43 mm          |
| LC 375HE             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             | ſ | 37 mm          |
| LC 380HE             |        | •         | -      | •         | -           | -            | -              | -            | •              | -          | -           | -           | -               | •             | -                 | •                   | •            | -             | -             |   | 37 mm          |
|                      |        |           |        |           |             |              |                |              |                |            |             |             |                 |               |                   |                     |              |               |               |   |                |

Camcorder

Integrated loudspeaker
 Integrated VITC Generator

# Sockets and Filter Threads of Camcorders (Part 2)

| Signal               | Digital Video | S-Video | Video | Video     | Video       | Video      | Audio (Mono) | Audio (Stereo) | Audio (Stereo) | Audio (Mono) | Audio (Stereo) | RC (REC)   | RC (REC/PB) | Edit Bus   | it New Edit Bus | Control-L Bus | Microphone (Mono) | Mikrofon (Stereo) | Earphone   | VITC          | СНС           |   |                |
|----------------------|---------------|---------|-------|-----------|-------------|------------|--------------|----------------|----------------|--------------|----------------|------------|-------------|------------|-----------------|---------------|-------------------|-------------------|------------|---------------|---------------|---|----------------|
| Camcorder            | IEEE 1394     | Hosiden | BNC   | 1 x Cinch | 8-pin Movie | 4-pin Jack | 8-pin Movie  | 8-pin Movie    | 4-pin Jack     | 1 x Cinch    | 2 x Cinch      | 2.5mm Jack | 2.5mm Jack  | 5-pin Edit | 11-pin New Edit | 2.5mm Jack    | 3.5mm Jack        | 3.5mm Jack        | 3.5mm Jack | 10-pin Socket | 10-pin Socket |   | Filter Thread  |
| LC 400C              | -             | -       | -     | •         | -           | -          | -            | -              | -              | •            | -              | -          | -           | •          | -               | -             | -                 | -                 | -          | -             | -             |   | 37 mm          |
| LC 410C              | -             | -       | -     | •         | -           | -          | -            | -              | -              | •            | -              | -          | -           | •          | -               | -             | -                 | -                 | -          | -             | -             |   | 37 mm          |
| LC 435E              | -             | -       | -     | •         | -           | -          | -            | -              | -              | •            | -              | -          | -           | -          | -               | •             | -                 | •                 | -          | -             | -             |   | 37 mm          |
| LC 445E              | -             | -       | -     | •         | -           | -          | -            | -              | -              |              | -              | -          | -           | -          | -               |               | -                 |                   |            | -             | -             |   | 37 mm          |
| LC 450SC             | -             | •       | -     | •         | -           | -          | -            | -              | -              | -            | •              | _          | -           | -          | •               | -             | _                 | •                 | -          | -             | -             | Ш | 37 mm          |
| LC 460SC             | -             |         | -     |           | -           | -          | -            | -              | -              | -            |                | -          | -           | -          |                 | -             | -                 |                   |            | -             | -             |   | 37 mm          |
| LC 475HE             | -             | •       | -     | •         | -           | -          | -            | -              | -              | -            | •              | -          | -           | -          | -               | •             | _                 | •                 | •          | -             | -             | Ш | 37 mm          |
| LC 485HE             | -             |         | -     | _         | -           | -          | -            | -              | -              | -            |                | -          | -           | -          | -               |               | -                 |                   |            | -             | -             |   | 37 mm          |
| LC 500C              | -             | -       | -     | •         | -           | -          | -            | -              | -              | •            | -              | _          | -           | •          | -               | -             | -                 | -                 | -          | -             | -             | Ш | 37 mm          |
| LC 535E              | -             | -       | -     |           | -           | -          | -            | -              | -              |              | -              | -          | -           | -          | -               |               |                   | -                 |            | -             | -             |   | 37 mm          |
| LC 550SC             | -             | •       | -     | •         | -           | -          | -            | -              | -              | •            | -              | _          | -           | -          | •               | -             | _                 | •                 | •          | -             | -             | Ш | 43 mm          |
| LC 560SC             | -             |         | -     |           | -           | -          | -            | -              | -              |              | -              | -          | -           | -          |                 | -             | -                 |                   |            | -             | -             |   | 43 mm          |
| LC 575E              | -             | •       | -     | •         | -           | -          | -            | -              | -              | -            | •              | _          | -           | -          | -               | •             | -                 | •                 | •          | -             | -             | Ш | 37 mm          |
| LC 600C              | -             | -       | -     |           | -           | -          | -            | -              | -              | •            | -              | -          | -           |            | -               | -             | -                 | -                 | -          | -             | -             |   | 43 mm          |
| LC 610C              | -             | -       | -     | •         | -           | -          | -            | -              | -              | •            | -              | -          | -           | •          | -               | -             | -                 | -                 | -          | -             | -             | Ш | 43 mm          |
| LC 635E              | -             | -       | -     |           | -           | -          | -            | -              | -              |              | -              | -          | -           | -          | -               | •             |                   | -                 | -          | -             | -             |   | 37 mm          |
| LC 645E              | -             | -       | -     | •         | -           | -          | -            | -              | -              | -            | •              | -          | -           | -          | -               | •             | -                 | •                 | •          | -             | -             | Ш | 37 mm          |
| LC 650SC             | -             | •       | -     | -         | -           |            | -            | -              |                | -            | -              | -          | -           | -          |                 | -             | -                 |                   | -          | -             | -             | Н | 43 mm          |
| LC 675HE             | -             |         | -     | _         | -           | -          | -            | -              | -              | -            |                | -          | -           | -          | -               | •             | _                 |                   |            | -             | -             | Н | 37 mm          |
| LC 685HE             | -             | •       | -     |           | -           | -          | -            | -              | -              | -            |                | -          | -           | -          | -               |               | -                 |                   |            | -             | -             |   | 52 mm          |
| LC 695SN<br>LC 700C  | -             |         | -     | -         | -           | -          | -            | -              | -              | -            | _              | _          | _           | *          | -               | -             | -                 |                   | 1)         | 2)            | _             | Н | 49 mm          |
| LC 700C              | -             | -       | -     |           | -           | -          | -            | -              | -              | •            | -              | -          | -           |            | -               | •             | •                 | -                 | •          | -             | -             | Н | 43 mm          |
| LC 750SC             | -             | -       | -     | _         | ı           | -          | -            | -              | -              | _            | •              | _          | -           | -          | -               |               |                   | -                 |            | H             | -             | Н | 37 mm          |
| LC 760SC             | -             | •       | -     | -         | -           |            |              |                | -              | -            | •              | -          | -           | •          | -               | -             | -                 |                   |            | -             | -             |   | 43 mm<br>43 mm |
| LC 775HE             | -             |         | -     | -         | -           |            | -            | -              | -              | -            |                | -          | -           |            | -               | -             | -                 |                   |            | 2)            | -             |   | 43 mm<br>37 mm |
| LC 775HE<br>LC 785HE | -             | •       | -     |           | -           |            | -            |                |                |              |                | -          |             | -          | -               |               | -                 |                   |            | -             | -             |   | 52 mm          |
| LC-D 80E             | -             | _       |       |           | -           | _          |              |                |                | -            |                | _          | _           |            | _               |               | -                 |                   |            |               | _             | H |                |
| LC-D 80E             | -             | -       | -     |           | -           |            | -            | -              | -              | •            | -              | -          | -           | -          | -               |               |                   | -                 | •          | -             |               | Н | 52 mm<br>37 mm |
| DLC 1                | -             | -       | _     | *         | _           | *          |              | -              | *              |              | *              |            | _           | *          | *               |               |                   | •                 |            | *             | _             |   | 30.5 mm        |
| DEC 1                |               |         |       |           | _           |            | _            |                |                |              |                |            | _           |            |                 |               |                   |                   |            |               | _             | П | 30.3 11111     |



Grundig Service 4.9

Built-in loudspeaker
 Built-in VITC Generator
 Tata not yet available on editorial close

### Camcorder Service Manuals (Series LC ...)

|                      |                              |                    |                     |                       |                                  | •                                 |                      |                      |                        |                       |                        | ,                                |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          |                       |
|----------------------|------------------------------|--------------------|---------------------|-----------------------|----------------------------------|-----------------------------------|----------------------|----------------------|------------------------|-----------------------|------------------------|----------------------------------|-------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------------------|------------------------|----------------------------------|--------------------------|--------------------------|-----------------------|
|                      |                              | I                  | ĺ                   | 1                     | İ                                |                                   |                      | 1                    | I                      | I                     | 1                      | Ì                                |                         | Ì                      | ĺ                     | ĺ                     |                       | ĺ                             | ĺ                    |                        |                      |                      |                      |                      | ĺ                    | ĺ                    |                                   | ĺ                      |                                  |                          |                          | ı                     |
|                      |                              |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | ı                     |
|                      |                              |                    |                     |                       | Œ                                | 72010-508.65 (FL Drive Mechanism) |                      |                      |                        |                       |                        | ſε                               |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      | 72010-519.60 (DL Drive Mechanism) |                        | Ē                                |                          |                          |                       |
|                      |                              |                    |                     |                       | nis                              | äli                               |                      |                      |                        |                       |                        | isi                              |                         |                        |                       |                       |                       | æ                             |                      |                        |                      |                      |                      |                      |                      |                      | ani                               |                        | isi                              |                          |                          |                       |
|                      |                              | as                 |                     |                       | ha                               | ÿ                                 |                      |                      |                        |                       |                        | ha                               |                         |                        |                       |                       |                       | Jen<br>Jen                    |                      |                        |                      |                      |                      |                      |                      |                      | ű                                 | İ                      | ha                               |                          |                          |                       |
|                      |                              | Additional Manuals |                     |                       | 72010-507.95 (U Drive Mechanism) | ₩                                 |                      |                      |                        |                       |                        | 72010-512.16 (A Drive Mechanism) | Ш                       | ╢                      |                       |                       | _                     | 72010-513.26 (1st Supplement) |                      |                        |                      |                      |                      |                      |                      |                      | Me                                |                        | 72010-525.05 (B Drive Mechanism) | (E)                      | (E)                      | ı                     |
|                      |                              | $\mathbb{Z}$       |                     | $\widehat{}$          | e<br> -                          | Ş                                 | _ (                  | ₹   £                | 2 2                    | 8                     | 꺎                      | e                                | 72010-512.20 (LC 280HE) | 72010-512.55 (NA 190A) | <u>@</u>              | <del>(</del>          | 5E)                   | dd                            |                      | -4)                    |                      |                      | (                    | 0                    |                      | ပ                    | \<br>Ve                           | 72010-524.90 (NA 190A) | e <u>~</u>                       | 72010-525.05 (LC 685 HE) | 72010-529.35 (LC 785 HE) | (                     |
|                      |                              | لق                 | 8                   | 72010-507.66 (NA 8-1) | ΞÌ                               | Ori:                              | 72010-509.30 (NA 75) | 72010-510.10 (NA 75A | 72010-510.23 (IVA 6-2) | 72010-511.55 (NA 75B) | 72010-511.90 (LC 232E) | Ξ                                | 28                      | 19                     | 72010-512.65 (NA 8-3) | 72010-512.95 (NA 8-4) | 72010-513.25 (LC 235E | Sn                            | 72010-514.00 (NA 85) | 72010-514.45 (LCS 8-4) | 72010-514.60 (NA 90) | 72010-516.25 (NA 95) | 72010-517.50 (NA 96) | 72010-517.51 (NA 96D | 72010-517.55 (NA-L1) | 72010-519.55 (NA 96C | D.                                | 19                     | ιż                               | 89                       | 78                       | 72010-800.00 (Safety) |
|                      |                              | ţį                 | 72010-507.65 (NA 8) | ₹                     |                                  | 닏                                 | ≸lŝ                  | ≸  <u></u>           | ξ (v                   | 2 ≶                   | ျပ                     | A<br>D                           | ပု                      | ₹                      | ₹                     | ¥                     | ပ                     | 1st                           | ₹                    | ပ္                     | ¥                    | Ϋ́                   | ٨                    | ٧                    | ¥                    | ¥                    | 7                                 | ₹                      | 3                                | ပျ                       | ပု                       | Saf                   |
|                      |                              | g                  | 2 (                 | 9                     | 2 (1                             | 2                                 | 0                    |                      | בוכ                    | 2 2                   |                        | 9                                | 0                       | 2                      | 2 (1                  | 2 (                   | 5 (1                  | 9                             | 1) 0                 | )<br>2                 | 1) 0                 | 2 (ا                 | I) (I                | 1 (                  | 2 (                  | 2                    | 0                                 | 1) 0                   | 2 (1                             | 2 (1                     | 2 (1                     | 0                     |
|                      |                              | ď                  | 7.6                 | 7.6                   | 7.9                              | 9.6                               | 9.3                  | -                    | 4.0                    | 5 5                   | 0.                     | 2.                               | 2.2                     | 2.5                    | 2.6                   | 2.9                   | 3.2                   | 3.2                           | 4.0                  | 4.4                    | 4.6                  | 5.2                  | 7.5                  | 7.5                  | 7.5                  | 9.5                  | 9.6                               | 4.9                    | 5.0                              | 5.0                      | 9.3                      | 0.0                   |
|                      |                              |                    | 20                  | 20                    | 20                               | 200                               | 200                  | 512                  | 2 7                    | 5 7                   | 5                      | 51,                              | 51;                     | 51;                    | 51;                   | 51;                   | 51;                   | 51;                           | 51,                  | 51,                    | 51,                  | 51                   | 51.                  | 51.                  | 51.                  | 513                  | 513                               | 52                     | 52                               | 52                       | 52                       | 80                    |
|                      |                              |                    | 6                   | 6                     | 6                                | 9                                 | <u>ا</u>             | <u></u>              | 7 6                    |                       | 임슨                     | 6                                | 9                       | 6                      | 6                     | 6                     | 10-                   | 6                             | 6                    | 10-                    | 10                   | 10-                  | 10-                  | 10-                  | 6                    | 6                    | 9                                 | 6                      | 9                                | 6                        | 6                        | 6                     |
| Camcorder            | Service Manual               |                    | 20                  | 20                    | 20                               | .20                               | 20                   | 202                  | 3 5                    | 202                   | 2 2                    | 20                               | 20                      | 20                     | 20                    | 20                    | 20                    | 20                            | 20                   | 20                     | .50                  | .50                  | 20                   | 20                   | 20                   | 20                   | 20                                | 20                     | 20                               | 20                       | 20                       | 20                    |
| LC 125C              | 72010-510.80                 |                    | 7                   | 7                     | _                                | ^                                 | •                    | <u> </u>             | <u> </u>               |                       |                        | _                                | _                       | _                      | 7                     | 7                     | 7                     | 7                             | 7                    | 7                      | 7                    | 7                    | 7                    | 7                    | 7                    | 7                    | _                                 | _                      | _                                | 7                        | _                        | •                     |
| LC 145E              | 72010-510.85                 |                    | •                   |                       |                                  | •                                 |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 175HE             | 72010-510.55                 |                    |                     |                       | •                                |                                   |                      | •                    | •                      |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 180HE             | 72010-511.10                 |                    | •                   |                       |                                  | •                                 |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 210C              | 72010-511.50                 |                    |                     |                       |                                  |                                   |                      |                      |                        | •                     | •                      |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 215C              | 72010-511.55                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 225C              | 72010-512.25                 |                    |                     |                       |                                  |                                   | •                    |                      | $\prod$                |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 230E              | 72010-511.15                 |                    |                     |                       | •                                |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 232E              | 72010-511.90                 |                    |                     | •                     |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        |                       |                       |                       | _                             |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 235E              | 72010-513.25                 |                    |                     | •                     |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 240E              | 72010-512.15                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        | •                     |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 255SC             | 72010-511.60                 |                    |                     |                       |                                  |                                   | 1                    |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          |                       |
| LC 280HE             | 72010-512.20                 |                    | •                   |                       |                                  | •                                 |                      |                      |                        |                       |                        |                                  |                         |                        |                       | •                     |                       |                               |                      | •                      |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 285HE             | 72010-512.60                 |                    |                     |                       |                                  | •                                 |                      |                      |                        |                       |                        |                                  |                         | •                      |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 290N<br>LC 295SN  | 72010-512.35<br>72010-512.70 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 310C              | 72010-512.70                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               | •                    |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 320C              | 72010-513.20                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        | •                    |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 330E              | 72010-514.30                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       | •                      | •                                |                         |                        | •                     |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 335E              | 72010-514.70                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        | •                     |                       | •                     |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 345E              | 72010-513.10                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        | •                     |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 355SC             | 72010-514.75                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        | •                    |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 360SC             | 72010-513.15                 |                    |                     |                       |                                  |                                   |                      |                      | Т                      |                       |                        |                                  |                         |                        |                       |                       |                       |                               | •                    |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 375HE             | 72010-513.05                 |                    |                     | •                     |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 380HE             | 72010-513.00                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | •                                | •                       |                        |                       | •                     |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 400C              | 72010-515.90                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      | •                    |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 410C              | 72010-515.90                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      | •                    |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 435E              | 72010-516.45                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      | _                    |                      |                                   |                        |                                  |                          |                          |                       |
| LC 445E              | 72010-516.55                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | _                                |                         |                        | •                     |                       |                       |                               |                      |                        |                      |                      | •                    |                      | •                    |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 450SC             | 72010-516.95                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      | •                    |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 460SC<br>LC 475HE | 72010-517.00<br>72010-516.55 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        | •                     |                       |                       |                               |                      |                        |                      |                      |                      |                      | •                    |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 475HE             | 72010-516.55                 |                    |                     | •                     |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 500C              | 72010-513.95                 |                    |                     | -                     |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      | •                    |                      | •                                 |                        |                                  |                          |                          | •                     |
| LC 535E              | 72010-518.70                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      | •                    |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 550SC             | 72010-519.70                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      | •                    |                      |                      | •                    | •                                 |                        |                                  |                          |                          | •                     |
| LC 560SC             | 72010-519.65                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      | •                    |                      |                      | •                    | •                                 |                        |                                  |                          |                          | •                     |
| LC 575HE             | 72010-518.65                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      | •                    |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 600C              | 72010-524.25                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      | •                    | •                                 |                        |                                  |                          |                          | •                     |
| LC 610C              | 72010-524.45                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      | •                    | •                                 |                        |                                  |                          |                          | •                     |
| LC 635E              | 72010-524.30                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        | •                                |                          |                          | •                     |
| LC 645E              | 72010-524.35                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      | •                    | •                                 |                        | •                                |                          |                          |                       |
| LC 650SC             | 72010-525.45                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        | •                                |                          |                          |                       |
| LC 675HE<br>LC 685HE | 72010-525.50<br>72010-525.55 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          | •                        | •                     |
| LC 695SN             | 72010-525.55                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   | •                      |                                  |                          |                          | •                     |
| LC 700 C             | 72010-524.40                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      | •                    |                      |                      | •                                 |                        |                                  |                          |                          | •                     |
| LC 735 E             | 72010-529.45                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        | •                                |                          |                          | •                     |
| LC 750 SC            | 72010-530.90                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      | •                    |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 760 SC            | 72010-530.95                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      | •                    |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| LC 775 HE            | 72010-529.40                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        | •                                |                          |                          | •                     |
| LC 785 HE            | 72010-529.35                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        | •                                | •                        |                          | •                     |
| LC-D 80E             | 72010-517.15                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        | •                                |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      | •                    |                      |                                   |                        |                                  |                          |                          | •                     |
| LC-D 100E            | 72010-518.60                 |                    |                     |                       |                                  |                                   |                      |                      |                        |                       |                        |                                  |                         |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      |                                   |                        |                                  |                          |                          | •                     |
| DLC 1                | 72010-531.45                 |                    |                     |                       | T                                |                                   |                      |                      |                        |                       |                        |                                  | 1                       |                        |                       |                       |                       |                               |                      |                        |                      |                      |                      |                      |                      |                      | 1                                 | 1                      | 1                                |                          | ı                        | •                     |

Camcorder

| Grundig | Annual | 1998 |
|---------|--------|------|
|---------|--------|------|

|  | Video | <b>Editing</b> | Systems |
|--|-------|----------------|---------|
|--|-------|----------------|---------|

| Contents: Video Editing Systems                     |     |
|---|-----|
| Socket Contact Configuration of the VS 10 and VS 20 | 5.2 |

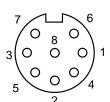


Grundig Service 5.1

### **Socket Contact Configuration of the Editing Systems** VS 10 and VS 20.

### 1. Sockets "REC. IN", "REC OUT", "PLAYER" and "MONITOR":

8-contact acc. to DIN 45326

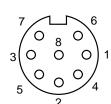


### Contact

- 1 C-signal
- 2 Ground
- Ground
- Video
- 5 Audio left
- 6 Y-signal
- 7 Audio right
  - not used

### 2. "MONITOR" socket on RGB mode (only VS 20):

8-contact acc. to DIN 45326

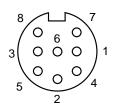


### Contact

- 1 Blue signal
- 2 Ground
- 3 RGB switching voltage
- Green signal
- 5 Audio left
- 6 Red signal
- 7 Audio right
- Video

### 3. REMOTE socket "PL./REC.":

8-contact acc. to DIN 41524



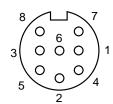
#### Contact

- 1 Data Recorder
- Ground
- 3 Data Player
- 4 not used
- 5 not used
- 6 Clock Recorder
- 7 **Clock Player**
- not used

### 4. REMOTE socket "AUX" (keyboard):

Editing

8-contact acc. to DIN 41524



### Contact

- PC Clock
- PC Data
- 3 Reset (1 TXD)
- Ground
- VCC (+5 V) 5
- 6 1 RXD
- SCL
- SDA

### Advice:

The keyboard (PC/XT-compatible) uses only contacts 1 to 5 of the "Remote-AUX" socket. Consequently the keyboard plug is only 5-pin. The contact pins to contacts 6, 7 and 8 of the "Remote-AUX" socket are missing in the keyboard plug. AT-keyboards are not suitable for VS 10 and VS 20.

**Keyboard Pinning** 

Clock

Data

Reset

Ground

VCC (+5 V)

2

3

4

5

# **Contents: Satellite Reception**

| Module Chart of Satellite Receivers                   | 6.2  |
|---|------|
| Retro-fitting Options for Grundig SAT Receivers       | 6.3  |
| Cassettes for Extension of the STC 8xx Head Station   | 6.3  |
| Tele-Pilot® Remote Control Handsets / Survey of Types | 6.5  |
| Special Functions of Satellite Receivers (Options)    | 6.6  |
| Service Manuals from 1992 on                          | 2.63 |

SAT

Grundig Service 6.1

# **GRUNDIG Satellite Receivers**

| Designation       | Part No.     | STR 100 | STR 100 DX | STR 110 | STR 501 | STR 502 | STR 511 | STR 512 | STR 631 | STR 632 | STR 400 AP | STC 1600 | STC 1650 | HRM 800 | HRM 801 | HRM 802 | HRM 805 | HRM 810 | HRM 811 | HRM 820 | HRM 851 | HRM 852 | HRM 858 (a) | HRM 854 | HRM 861 | HRM 864 | HRM 883 | HCM 814 | HCM 893 |
|-------------------|--------------|---------|------------|---------|---------|---------|---------|---------|---------|---------|------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|---------|
| Tuner (Terr.)     | 29504-101.23 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         | •       | •       |         |         |             |         |         |         |         | •       |         |
| Tuner             | 29504-101.62 |         |            |         |         |         |         |         |         |         |            |          |          | •       | •       | •       | •       |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-101.63 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         | •       |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-201.24 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         | 2)      |
| Tuner             | 29504-201.61 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         | •       | •       | •           | •       | •       | •       |         |         |         |
| Tuner             | 29504-201.62 |         |            |         |         |         |         |         |         |         | •          |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-201.73 |         |            |         |         |         | •       |         |         |         |            | •        | •        |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-201.74 |         |            |         |         |         |         | •       |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-201.77 | •       |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         | 2)      |         |         |
| Tuner             | 29504-201.81 |         |            |         | •       |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 29504-201.87 |         | •          | •       |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 75990-400.16 |         |            |         |         | •       |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 75990-900.30 |         |            |         |         |         |         |         | •       |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Tuner             | 75990-900.42 |         |            |         |         |         |         |         |         | •       |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.03 |         |            |         |         |         |         |         |         |         |            |          |          | •       |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.04 |         |            |         |         |         |         |         |         |         |            |          |          |         | •       |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.05 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         | •       |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.06 |         |            |         |         |         |         |         |         |         |            |          |          |         |         | •       |         |         |         |         |         | •       |             |         |         |         |         |         |         |
| Modulator         | 29502-017.08 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         | •       |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.12 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         | •       |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.13 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         | •       |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 29502-017.51 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         | 1)          |         |         |         |         |         |         |
| Modulator         | 29502-017.52 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         | 1)          |         |         |         |         |         |         |
| Modulator         | 29502-017.53 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             | •       |         |         |         |         |         |
| Modulator         | 29502-017.55 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         | •       |         |         |         |
| Modulator         | 29502-017.58 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         | •       |         |         |         |         |
| Modulator         | 29502-017.60 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         | 2)      |         |         |
| Modulator         | 29502-017.62 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         | •       |         |
| Modulator         | 29502-017.65 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         | 2)      |
| Modulator         | 75990-100.27 |         |            |         | •       | •       |         |         |         |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 75990-900.31 |         |            |         |         |         |         |         | •       |         |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| Modulator         | 75990-900.43 |         |            |         |         |         |         |         |         | •       |            |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| PLL-Modulator     | 29502-025.31 |         |            |         |         |         | •       | •       |         |         | •          |          |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| PLL-Modulator UHF | 29502-025.33 |         |            |         |         |         |         |         |         |         |            | 3)       |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| PLL-Modulator VHF | 29502-025.34 |         |            |         |         |         |         |         |         |         |            | 3)       |          |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| PLL-Modulator UHF | 29502-025.36 |         |            |         |         |         |         |         |         |         |            |          | 3)       |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| PLL-Modulator VHF | 29502-025.37 |         |            |         |         |         |         |         |         |         |            |          | 3)       |         |         |         |         |         |         |         |         |         |             |         |         |         |         |         |         |
| DSR Mixer         | 29502-017.07 |         |            |         |         |         |         |         |         |         |            |          |          |         |         |         |         |         |         | •       |         |         |             |         |         |         |         |         |         |

- 1) HRM 858 -017.51, HRM 858a -017.52
- 2) 2 for each cassette
- 3) VHF or UHF dependent on the type of modulator fitted

SAT

6.2 Grundig Service

### SAT

### **Retro-fitting Options for Grundig SAT Receivers**

Descrambler Retro-fit Kit DNS 850 C: 15-pin Sub-Min-D socket incl. the necessary electronics, retro-fittable to the cassettes HRM 851, 852, 853, 854, 855, 857, 858, 858a, 859, 861, 864, 883.

Order no.: GAY 4300 (adapter cable is included)

Adapter cable from 15-pin Sub-Min-D to Euro-AV.

Order no.: GAW 3000

### Cassettes for Extension of the STC 8xx Head Station

SAT - TV Cassettes (input range 950-1750 MHz)

HRM 800 output: Band III (C5...C12) and (S8\*...S20) Mono

Order no.: GAV 70

\* S5/S6/S7 can be used (however the use of S18/S19/S20 is excluded in this case)

HRM 801 output: Band I (C2, 3, 4) Mono

Order no.: GAV 9200

HRM 802 output: UHF (C21 - C40) Mono

Order no.: GAV 9300

HRM 805 output: VHF- OIRT (R6 - R12) Mono

Order no.: GAV 9800

SAT - TV Cassettes (input range 910-2050 MHz)

HRM 851 output: Band I (C2, 3, 4) Mono

Order no.: GAX 9600

HRM 852 output: UHF (C21 - C40) Mono

Order no.: GAX 9700

HRM 858 output: Band III (C5 - C12) and (S8\*...S20) Stereo

Order no.: GAX 7300

\* S5/S6/S7 can be used (however the use of S18/S19/S20 is excluded in this case)

HRM 858a output: Band III (C5 - C12) und (S4 - S20) Stereo

Order no.: GAY 4200(replaces cassette HRM 858) HRM 854 output: Hyperband (S21 - S41) Stereo

Order no.: GAY 4100

HRM 861 output: Band I (C2, 3, 4) Stereo

Order no.: GAZ 2300

HRM 864 output: Band IV (C21- C40) Stereo

Order no.: GAZ 2200

SAT-TV-TWIN Cassettes - not for STC 800/850

(input range 950-2150 MHz)

HRM 883 output: Band III (C5 - C12) and (S3 - S30) Stereo

Order no.: GAY 8000

HRM 883-2 Order no: Band III (C5-C12) and (S3-S30) Stereo

Order no.: GAC 3000 (with the possibility of connecting 2 descramblers)

Grundig Service 6.3

SAT

Terrestrial TV Cassettes

HRM 810 input: C2...C4/C5...C12/C21...C69

output: Band III (C5...C12) and (S8\*...S20)

Order no.: GAV 9500

HRM 811 input: C2...C4/C5...C12/C21...C69

output: Band I (C2, 3, 4)

Order no.: GAW 1700

HRM 815 input: R1...R12/R21...R69

output: R6...R12/S8...S20

Order no.: GAX 1800

HCM 814 input: C2...C4/C5...C12/C21...C69

output: Band IV (C21...C40)

Order no.: GAC 1200

**Terrestrial Twin Cassettes** 

HCM 893 input: C2...C4/C5...C12/C21...C69

output: Band III (C5...C12) and (S3...S30)

Order no.: GAD 0800

**UKW Cassette** 

HRM 825FM input: 87...108 MHz

output: 87...108 MHz

Order no.: GAW 8800

Accessories for the STC 1600 Head Station HM 1600 VHF output: C5 - C12 and S5 - S20

Order no.: GAY 4500 (2 pieces in each package)

HM 1602 UHF output: C21 - C69

Order no.: GAY 4600 (2 pieces in each package)

HR 1600 Pivoted extension unit for additional 8 channel lines

Bestellnr.: GAY 4700

HR 1600 MD Pivoted extension unit for additional 8 channel lines with decoder

connection

Order no.: GAZ 2800

ZAN 1600 Retro-fit kit for connection of a second dish aerial

Order no.: GAY 7700

FMN 1600 FM amplifier retro-fit kit

Order no.: GAY 7600

Accessories for the STC 1650 Head Station

HM 1650 VHF output: C5 - C12 and S4 - S24

Order no.: GAZ 3400

HM 1652 UHF output: C21 - C65

Order no.: GAZ 3500

HR 1650 Pivoted extension unit for additional 8 channel lines

Order no.: GAZ 3300

# **GRUNDIG Tele-Pilot® Remote Control Handsets / Overview Satellite Product Range**

rc sat



29622-046.17

**TP 720 SAT** 



29642-059.18

**TP 820 SAT** 



29642-061.03

**TP 805 SAT** 



75990-900.06

SAT

Grundig Service 6.5

# **Special Functions of Satellite Receivers (Options)**

| Model   | Option  | Sequence of Operations  |
|---|---|---|
| STR 311/312<br>STR 511/512  | Changing the remote control level   | Depress and hold the "P/F" button down while switching on with the mains button. The currently active level is indicated. When keeping the "P/F" button pressed the SAT receiver switches over to the second level.  The necessary conversion of the "rc sat" remote control is described in the Service Information TV 21/93 and 22/95. With the remote control TP 720 SAT the second level can be activated by pressing the desired function key and the "AUX" button simultaneously. |
| STR 311<br>STR 312  | Changing the oscillator frequency (9.75/10.0 GHz) Only with certain μP: STR 311 - ZC 88657 STR 312 - ZC 88659   | Depress and hold the "V/H" button down while switching on with the mains button. The currently set frequency is indicated. Change the setting with the "<" ">" buttons and store it by pressing the "M" button.   |
| STR 312<br>STR 322<br>STR 512   | Changing the OSD position   | Depress and hold down the "i" button on the remote control while switching on with the mains button. With the buttons on the remote control it is possible to set the horizontal position. Confirm the setting with the "OK" button and leave the Service Menu with "i".  |
| STC 800<br>STC 850<br>STC 880<br>STC 2400<br>CT 800                       | Display test and indication of the software version   | Depress the buttons "+" and "Mode" simultaneously and hold them down. First the display becomes dark (all pixels are driven). After approx. 5 s - as long as these buttons are pressed - a number is displayed. The last two figures of this number indicate the software version.  |
| STR 310<br>STR 320<br>STR 325<br>STR 410<br>STR 420<br>STR 501<br>STR 502 | Loading the emergency<br>data set<br>(the oscillator frequency is<br>set to 9.75 GHz and the<br>programme positions with<br>predetermined ASTRA<br>reception frequencies are<br>loaded) | Menu guide: "i", "i", "4 Installation", "5" (not indicated as a menu option), enter the number "2208" for "Code". The emergency data set is loaded.   |
| STR 631<br>STR 632<br>STR 641<br>STR 642                                  | Loading the emergency<br>data set<br>(the oscillator frequency is<br>set to 9.75 GHz and the<br>programme positions with<br>predetermined ASTRA<br>reception frequencies are<br>loaded) | Menu guide: "i", "i", "2 Installation", "5" (not indicated as a menu option), enter the number "2846" for "Code". The emergency data set is loaded.   |

# **Contents Audio**

| Tape Run, Tape Speed and Torque Test and Adjustment Cassettes | 7.2  |
|---|------|
| Tele-Pilot® Remote Control Handsets / Survey of Types         | 7.5  |
| Service Manuals from 1992 on:                                 |      |
| Audio/HiFi  | 7.10 |
| Car Audio   | 7.14 |
| Anti-theft Systems for Car Radios                             | 7.16 |
| Anti-theft Coding of Car Radios                               | 7.17 |

Audio

Grundig Service 7.1

# **GRUNDIG - Tape Run, Tape Speed and Torque Test and Adjustment Cassettes**

**Attention!** Before loading a tape run test or adjustment cassette, clean the heads, pressure roller(s), tape guides, and capstan(s) with spirit. During the tape run test the tape must not bend at the upper or lower edge of the head forks and tape guides.

The adjustment of the tape run is described in the corresponding Service Manual.

**Tape Run Cassette 457**, with guide lug (part no. 35079-015.00)

For checking and adjusting the tape run of cassette recorders, especially for front direct loaders.

Tape Run Cassette 459, without guide lug (part no. 35079-008.00).

For checking and adjusting the tape run of cassette recorders.

**Tape Run Cassette 3 / MC-112C,** with mirror, without guide lug (part no. 72008-247.00)

For checking and adjusting the tape run of cassette front loaders.

Torque Test Cassette 456, (part no. 35079-014.00).

For measuring the torque of the take-up clutch and of the basic braking torque of the supply clutch.

FeCr - Test Tape Cassette 454, acc. to IEC 3 Standard (part no. 35079-016.00)

This tape is used for self-produced recordings to adjust the recording channel in terms of equalization and operating point.

Audio

Fe - Test Tape Cassette 449, acc. to IEC 1 Standard (part no. 35079-019.00)

Side A - For checking and adjusting the reference or Dolby -0- level, the tape speed, as well as the head gap position and the playback frequency response.

Side B - For self-produced recordings for measuring by tape. The magnetic tape flux of reference level is 250 pWb/mm. Time constant : 3180  $\mu$ s and 120  $\mu$ s .

7.2 Grundig Service

### Fe - Test Tape Cassette 449

| 1      | Γhe       | leve         | el is 2   | 20 d         | IB low      | ver          | than      | the          | refe     | rend         | ce le     | vel          | (U <sub>a</sub> = | 1/10         | ) U <sub>B</sub> ) |              | Ref.<br>level                   |              |                 |                 | dB lov<br>f. level         |              |
|--------|-----------|--------------|-----------|--------------|-------------|--------------|-----------|--------------|----------|--------------|-----------|--------------|-------------------|--------------|--------------------|--------------|---------------------------------|--------------|-----------------|-----------------|----------------------------|--------------|
| 1<br>k | l6<br>KHz | Announcement | 14<br>kHz | Announcement | 12,5<br>kHz | Announcement | 10<br>kHz | Announcement | 4<br>kHz | Announcement | 250<br>Hz | Announcement | 125<br>Hz         | Announcement | 8<br>kHz           | Announcement | 315 Hz<br>250<br>pWb/mm         | Announcement | 50<br>Hz        | Announcement    | 3150<br>HZ                 | Announcement |
| 1      | 10"<br>1  | 5"           | 10"       | 5"           | 10"         | 5"           | 10"       | 5"<br>Par    |          | 5"           | 10"       | 5"           | 10"               | 5"           | 60"                | 5"           | 30"<br><b>←</b> Part 2 <b>→</b> | 5"           | 50"<br><b>◄</b> | <br> 5"<br>Part | <br>  50"<br>: 1— <b>▶</b> | 5"           |

Direction of tape run, V= 4.76 cm/s

Cr - Test Tape Cassette 448 A, (part no. 35079-023.00) acc. to IEC II, NEW Norm, Charge U 564W

According to **IEC 2** Standard NEW, **Side A** - For checking and adjusting the reference or Dolby -0- level, the magnetization corresponds to DIN 45513 Bl. 7 (250 pWb/mm). The 315Hz-level can be used to adjust the Dolby level, 200 pWb/mm. The cassette is also used for checking and adjusting the tape speed (3150Hz und 50Hz) and the head gap position (10kHz). The frequencies 40/250 Hz and 6.3/10/12.5/14/16 and 18kHz are used for checking and adjusting the playback frequency response.

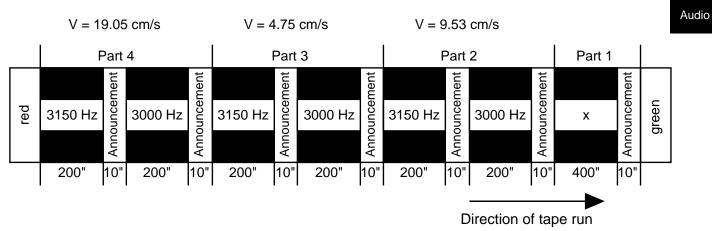
Side B - For self-produced recordings for measuring by tape. Time constant : 3180  $\mu$ s and 70  $\mu$ s.

### **Test Tape Cassette 448 A**

| TI        | ne l         | evel i    | s 20         | ) dB      | lowe         | er tha      | an th | ne re      | fere         | ence      | lev          | el (U    | <sub>a</sub> =1 | /10 U <sub>B</sub> | )            | Ref.<br>level           |              |          |              | dB low<br>. level |              |
|-----------|--------------|-----------|--------------|-----------|--------------|-------------|-------|------------|--------------|-----------|--------------|----------|-----------------|--------------------|--------------|-------------------------|--------------|----------|--------------|-------------------|--------------|
| 18<br>kHz | Announcement | 16<br>kHz | Announcement | 14<br>kHz | Announcement | 12.5<br>kHz |       | 6.3<br>kHz | Announcement | 250<br>Hz | Announcement | 40<br>Hz | Announcement    | 10<br>kHz          | Announcement | 315 Hz<br>250<br>pWb/mm | Announcement | 50<br>Hz | Announcement | 3150<br>HZ        | Announcement |
| 10"       | 5"           | 10"       | 5"           | 10"       | 5"           | 10"         |       | 10"        | 5"           | 10'       | 5"           | 10"      | 5"              | 60"                | 5"           |                         | 5"           | 50"      | 5"           | 50"               | 5"           |
| •         |              |           |              |           |              |             | Pai   | t 3 –      |              |           |              |          |                 | <b></b>            |              | Part 2 ►                | ł            | •        | Part         | : 1—▶             |              |

Direction of tape run, V=4.76 cm/s

**GRUNDIG - Tape Speed Adjustment Cassette 467**, (part-no. 05679-045.00) For adjusting all tape speeds of tape recorders.



Grundig Service 7.3

Part 1 is used to check and adjust the tape speed by comparing it with the 50Hz mains frequency (Lissajous figure displayed on the oscilloscope). A circle is shown at a tape speed of 4.75cm/s, a horizontal eight at 9.5cm/s, and a four-pointed crown at 19cm/s.

The other parts on the test tape are used to check and adjust the tape speed with corresponding measuring instrumentes (wow and flutter meter according to DIN 45507, GRUNDIG GA 1000).

### **GRUNDIG Head and Tape Run Gauges for Cassette Recorders**

### **Head Gauge 034** (part no. 34000-034.00)

For setting the height and insertion depth of the AW-head for cassette recorders up to 1979/80 models which correspond to the HiFi-standard with the exception of the models CN 700, CN 710, 720 and CN 730.

### **Head Gauge 180** (part no. 34074-180.00)

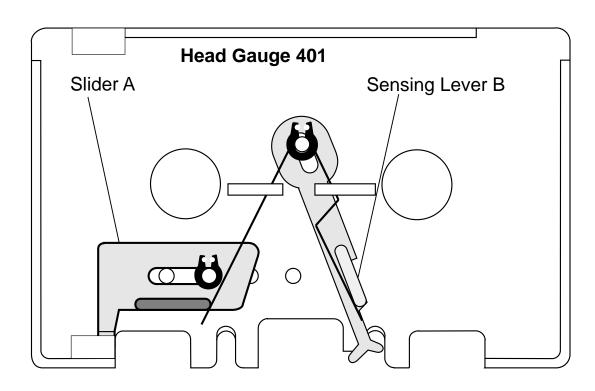
For setting the height and insertion depth of the AW-head of the HiFi models CF 5500/5500-2, MCF 500 and MCF 600.

### **Head Gauge 220**, (part no. 34065-220.00)

For setting the height and insertion depth of the AW-head of the HiFi models CF 5000/5000-2, CF 5100, SCF 6000/6100 and SCF 6200, CF 4200, CCF 4300/MKII, CF 7100, CF 7200, CF 7300, CF 7000/7400, CF 7150/7250 and CF 7500.

### **Head Gauge 401**, (part no. 72008-401.00)

For setting and checking the height and insertion depth of the AW or AW-L head (rotating head), the dummy head and the external tape guides of HiFi recorders.



Audio

7.4 Grundig Service

# **GRUNDIG Tele-Pilot®Remote Control Handsets/Survey of Types Audio Product Range**



M30/M40-RC 59802-613.01



CDC 477 RC 75954-027.17



M2/M6 RC 75954-028.68



RC M5 75952-022.10



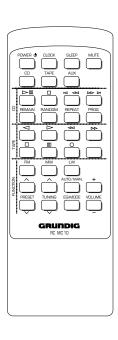
RC CDM 700 75954-062.93



RC 10 75950-504.87



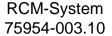
RC 20 75951-045.77



RC MC 10 75952-049.30

Grundig Service 7.5







CDM 3000/5000 RC 75954-029.95



RC 670 75951-030.50



RC 680 75953-800.15



RC 1 CD 59800-749.01



RC 2 59800-767.00



RC 3 75987-588.15



R 220 RC 75954-010.50



RC M 7/17/27 C RC M18/28/38 C RH 8809/00 75954-049.36



RC M 37 DC RC M48 DC RC 8623 75954-050.41



UMS1/2 75954-029.64



UMS11/12 75954-505.01



RC KM 11 75954-042.80



RC KM12/13 75954-062.57



RC CD22 75954-069.11



RC CD 23 75954-069.18

Grundig Service 7.7







Fine Arts Tuner 59802-601.01



Fine Arts CD-Player 59802-603.00



Fine Arts System DPL 59802-616.01



Grundig System 59802-608.01



City Line System 59802-607.01



URC 20 75954-068.56



M 100 59802-624.01

7.8







PA 1 75954-034.87

RC PA2/3 59802-619.01

K-RCD 500 75954-036.11



RC 400 75954-032.17



RR 750 CD 75954-047.28



RR 3500 CD RR 650 CD 75954-046.34



RC 437 75954-015.61

Grundig Service 7.9

### Service Manuals from 1992 on: Audio/HiFi

| Service Manuals from 199  |              |
|---------------------------|--------------|
| Set                       | Service      |
|                           | Manual       |
| AS - IR                   | 72010-741.15 |
| CCD 670                   | 72010-735.05 |
| CCD 680                   | 72010-739.65 |
| CCF 2                     | 72010-735.10 |
| CCF 3                     | 72010-734.00 |
| CCF 21 CITY LINE          | 72010-737.10 |
| CCF 23                    | 72010-755.65 |
| CCF 101 A                 | 72010-733.10 |
| CCF 101 A NEW ORLEANS     | 72010-733.10 |
| CCF 101 NEW ORLEANS CASS. | 72010-730.05 |
| CCF 102                   | 72010-741.80 |
| CCF 120                   | 72010-741.40 |
| CCF 210                   | 72010-737.10 |
| CCF 310                   | 72010-737.50 |
|                           | 72010-736.00 |
| CD 1                      | 72010-736.01 |
|                           |              |
| CD 2                      | 72010-737.35 |
|                           | 72010-737.36 |
| CD 2                      | 72010-737.35 |
| CD 3                      | 72010-737.36 |
| CD 11                     | 72010-745.35 |
| CD 12                     | 72010-745.50 |
| CD 21 CITY LINE SAN REMO  | 72010-738.05 |
| CD 21                     | 72010-755.55 |
| CD 22                     | 72010-755.55 |
| CD 22<br>CD 23            | 72010-756.35 |
| CD 102                    | 72010-730.33 |
| CD 102<br>CD 120          | 72010-741.80 |
| CD 120<br>CD 210          | 72010-741.40 |
| CD 210<br>CD 360          | 72010-738.03 |
| CD 360<br>CD 435          |              |
|                           | 72010-733.00 |
| CD 436                    | 72010-745.75 |
| CD 437                    | 72010-745.75 |
| CD 904                    | 72010-732.20 |
| CD - IR                   | 72010-741.15 |
| CD 1000                   | 72010-745.70 |
| CDC 14                    | 72010-745.40 |
| CDC 477                   | 72010-745.90 |
| CDM 700                   | 72010-755.70 |
| CDM 3000                  | 72010-747.15 |
| CDM 5000                  | 72010-747.15 |
| CDP 70                    | 72010-737.30 |
| CDP 75                    | 72010-745.15 |
| CDP 76                    | 72010-755.10 |
| CDP 80                    | 72010-737.30 |
| CDP 100                   | 72010-738.45 |
| CDP 110                   | 72010-745.15 |
| CDP 200                   | 72010-743.85 |
| CDP 210                   | 72010-755.15 |
| CDP-S 150                 | 72010-752.70 |
| CDP-S 250                 | 72010-757.10 |
| · <b></b>                 |              |

Audio

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

| ۸udi |    |
|------|----|
|      |    |
| Auai | O. |
|      |    |

| ·                  | Comitee                    |
|--------------------|----------------------------|
| Set                | Service<br>Manual          |
| CF 1               | <b>Manual</b> 72010-733.55 |
| CF 1 MK II         | 72010-733.35               |
| CF 4               | 72010-740.05               |
| CF 4<br>CF 11      | 72010-730.33               |
| CF 11<br>CF 21     | 72010-744.70               |
| CL-CCF 6 CITY LINE | 72010-735.60               |
| CL-CCF 6 CITT LINE | 72010-735.10               |
| CL-CD 6 CITY LINE  | 72010-737.36               |
|                    | 72010-737.30               |
| CL-V 6 CITY LINE   | 72010-735.90               |
| DCC 305            | 72010-735.60               |
| DSR 200            | 72010-012.20               |
| EQT 210            | 72010-737.15               |
| HEINZELMANN        | 72010-745.10               |
| K- RCD 100         | 72010-743.95               |
|                    | 72010-743.90               |
| K-CDP 65           | 72010-743.90               |
| K ODD co           | 72010-755.05               |
| K-CDP 66           | 72010-755.06               |
| K-RCD 110          | 72010-749.90               |
| K-RCD 120          | 72010-756.50               |
| K-RCD 500          | 72010-748.45               |
| KM 11              | 72010-750.05               |
| KM 12              | 72010-754.30               |
| KM 13              | 72010-757.15               |
| M 1                | 72010-737.10               |
| M 2                | 72010-746.05               |
| M 5                | 72010-738.65               |
| M 6                | 72010-746.05               |
| M 7-C              | 72010-752.25               |
| M 10               | 72010-733.30               |
| M 15               | 72010-740.60               |
|                    | 72010-745.20               |
| M 16               | 72010-740.60               |
| M 17-C             | 72010-752.25               |
| M 18-C             | 72010-755.85               |
|                    | 72010-735.70               |
| M 20               | 72010-735.71               |
| M 25 D/GB          | 72010-741.35               |
| M 26               | 72010-745.25               |
| M 26               | 72010-741.35               |
| M 27-C             | 72010-752.25               |
| M 28-C             | 72010-755.85               |
| M 30 CCF           | 72010-740.75               |
| M 30 CD            | 72010-740.75               |
| M 30-A             | 72010-740.75               |
| M 30-R             | 72010-740.75               |
| M 30-T             | 72010-740.75               |
| M 37-DC            | 72010-753.25               |
| M 38-C             | 72010-755.85               |
| M 40-CDC           | 72010-744.65               |
| M 48-DC            | 72010-755.85               |
| M 100 A            | 72010-749.15               |
|                    | 0 . 0 . 10.10              |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

Grundig Service 7.11

|                 | Convice           |
|-----------------|-------------------|
| Set             | Service<br>Manual |
| M 100 ADPL      | 72010-750.65      |
| M 100 CD        | 72010-749.80      |
| M 100-CD MKII   | 72010-745.86      |
| M 100 CDC       | 72010-754.33      |
| M 100 CF        | 72010-730:70      |
| M 100 R         | 72010-749.05      |
| M 100 T         | 72010-743.13      |
| MC 10           | 72010-738.00      |
| MC 10 GB        | 72010-738.00      |
| MINI 10         | 72010-733.30      |
| MINI 10 ORLANDO | 72010-733.30      |
| PA 1            | 72010-748.40      |
| PA 2            | 72010-746.55      |
| PA 3            | 72010-746.55      |
| PRISMA XI       | 72010-736.21      |
| R 1             | 72010-733.50      |
| R 2             | 72010-733.50      |
| R 2 GB          | 72010-733.50      |
| R 3 FINE ARTS   | 72010-735.80      |
| R 6 CITY LINE   | 72010-735.80      |
| R 11            | 72010-744.00      |
| R 12            | 72010-744.00      |
| R 14 DPL        | 72010-746.95      |
| R 21            | 72010-755.90      |
| R 22 DPL        | 72010-755.90      |
| R 23 DPL        | 72010-757.20      |
| R 102           | 72010-741.80      |
| R 120           | 72010-741.40      |
| R 210           | 72010-736.90      |
| R 210 GB        | 72010-736.90      |
| R 220           | 72010-741.40      |
| R 303           | 72010-720.80      |
| R 310           | 72010-740.65      |
| R 1000 DPL      | 72010-745.65      |
| RAVENNA D/GB    | 72010-733.30      |
| RCD 400         | 72010-747.05      |
| RCD 405         | 72010-752.30      |
|                 | 72010-739.35      |
| RF 630          | 72010-739.36      |
| RR 420 CD       | 72010-752.40      |
| RR 600 CD       | 72010-732.85      |
| RR 610 CD       | 72010-732.00      |
| RR 620 CD       | 72010-750.20      |
| RR 650 CD       | 72010-751.70      |
| RR 700 CD       | 72010-731.70      |
| RR 710 CD       | 72010-759.00      |
| RR 750 CD       | 72010-751.75      |
|                 | 72010-731.73      |
| RR 1950 CD      | 72010-718.36      |
| RR 2000         | 72010-738.25      |
| RR 3000 CD      | 72010-732.90      |
|                 | 0 . 0 . 0 0 0     |

Audio

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

Set

RR 3100 CD

RR 3200 CD

RR 3500 CD

YACHT BOY 400

YACHT BOY 500

Yacht Boy-P2000

| IXIX 3300 CD             | 12010-131.00 |
|--------------------------|--------------|
| RR 4000 CD               | 72010-739.40 |
| SC 900                   | 72010-754.45 |
| SC 910                   | 72010-754.40 |
| ST 16 (ADR)              | 72010-752.10 |
| ST 303                   | 72010-732.15 |
| T 1                      | 72010-733.45 |
| T 2                      | 72010-733.45 |
| T 4                      | 72010-735.85 |
| T 6                      | 72010-514.65 |
| T 12                     | 72010-742.65 |
| T 21 CITY LINE SAN REMO  | 72010-737.55 |
| T 22                     | 72010-755.40 |
| T 210                    | 72010-737.55 |
| T 310                    | 72010-737.55 |
| T - IR                   | 72010-741.15 |
| T 1000                   | 72010-745.55 |
| TT 1                     | 72010-740.70 |
| UMS 1                    | 72010-748.20 |
| UMS 2                    | 72010-748.20 |
| UMS 11                   | 72010-757.25 |
| UMS 12                   | 72010-757.25 |
| UMS 12-S                 | 72010-757.25 |
| V 1                      | 72010-733.15 |
| V 2                      | 72010-735.35 |
| V 3                      | 72010-735.90 |
|                          | 72010-735.91 |
| V 4                      | 72010-740.40 |
| V 11                     | 72010-742.45 |
| V 12                     | 72010-742.45 |
| V 14 DPL-RF              | 72010-752.15 |
| RBX-1                    | 72010-752.20 |
| V 21                     | 72010-755.45 |
| V 23                     | 72010-755.50 |
| V 101 A                  | 72010-732.95 |
| V 101 A NEW ORLEANS AMP: | 72010-732.95 |
| V 210                    | 72010-736.75 |
| V 210 GB                 | 72010-736.75 |
| V 310                    | 72010-736.75 |
| V 310 GB                 | 72010-736.75 |
| V 1000 DPL               | 72010-745.65 |
| YACHT BOY 360            | 72010-745.05 |
| VACUE DOV 400            | 70040 700 05 |

Audio

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

72010-739.25

72010-735.00

72010-757.00

Service

Manual

72010-738.30

72010-751.80

72010-751.80

Grundig Service 7.13

# Service Manual from 1992 on: Car Audio

|                       | nii Gai Adaio                |
|-----------------------|------------------------------|
| Set                   | Service Manual               |
| BOOSTER PA 120        | 72010-731.95                 |
| BOOSTER PA 240        | 72010-732.00                 |
| EC 4000 RDS           | 72010-748.50                 |
| EC 4290 CD            | 72010-750.55                 |
|                       | 72010-748.50                 |
| EC 4600 RDS           | 72010-752.75                 |
| EC 7400 RDS           | 72010-739.50                 |
| EC 7500 RDS           | 72010-739.50                 |
| MCD 20                | 72010-733.60                 |
| MCD 30                | 72010-737.25                 |
| MCD 36                | 72010-737.26<br>72010-748.30 |
| MCD 40                | 72010-748.30                 |
| SCD 1590 VD           | 72010-740.30                 |
| SCD 1910 RDS          | 72010-733.10                 |
| SCD 3590              | 72010-739.10                 |
| SCD 5260 RDS          | 72010-739.10                 |
| WKC 1100 VD           | 72010-749.33                 |
| WKC 1100 VD           | 72010-739.40                 |
| WKC 1101 VD           | 72010-739.40                 |
| WKC 1630              | 72010-741.95                 |
| WKC 1650 VD           | 72010-744.93                 |
| WKC 1630 VD           | 72010-738.70                 |
| WKC 1700 VD           | 72010-736.70                 |
| WKC 1700 VD           | 72010-791.85                 |
| WKC 1701 VD           | 72010-791.65                 |
| WKC 1703 RDS / RS     | 72010-738.15                 |
| WKC 1703 KDS / KS     | 72010-738.15                 |
| WKC 1704 RDS / RS     | 72010-738.15                 |
| WKC 1704 RDS / RS     | 72010-730.13                 |
| WKC 1903 RDS          | 72010-740.35                 |
| WKC 1903 KDS          | 72010-731.05                 |
| WKC 3100              | 72010-730.03                 |
| WKC 3101              | 72010-739.40                 |
| WKC 3101              |                              |
|                       | 72010-741.95                 |
| WKC 3200              | 72010-752.45                 |
| WKC 3201              | 72010-752.45                 |
| WKC 3300              | 72010-752.45                 |
| WKC 3301              | 72010-752.45                 |
| WKC 3600              | 72010-749.15                 |
| WKC 3630              | 72010-744.95                 |
| WKC 3650              | 72010-736.10                 |
| WKC 3700              | 72010-730.60                 |
| WKC 3700 R            | 72010-730.60                 |
| WKC 3701              | 72010-740.20                 |
| WKC 3701 R            | 72010-730.65                 |
| WKC 3703 RDS RS       | 72010-738.15                 |
| WKC 3704 RDS RS       | 72010-738.15                 |
| WKC 3705 RDS RS       | 72010-740.35                 |
| WKC 3705 RDS RS       | 72010-740.35                 |
| WKC 3870 RDS          | 72010-720.50                 |
| WKC 3880 RDS (MCD 44) | 72010-730.55                 |
| WKC 3880 RDS (MCD-A1) | 72010-730.55                 |

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

| Set          | Service Manual |
|--------------|----------------|
| WKC 3904 RDS | 72010-731.80   |
| WKC 3905 RDS | 72010-731.85   |
|              | 72010-731.70   |
| WKC 4871 RDS | 72010-720.00   |
|              | 72010-720.01   |
| WKC 5100     | 72010-746.36   |
| WKC 5101     | 72010-746.36   |
| WKC 5200     | 72010-746.36   |
| WKC 5201     | 72010-746.36   |
| WKC 5300     | 72010-746.30   |
| WKC 5600     | 72010-746.30   |
| WKC 6400 RDS | 72010-740.00   |
| WKC 6500 RDS | 72010-740.00   |

Audio

Observe also the instructions given in the Safety Service Manual Part No. 72010-800.00 (p.1.16pp)

Grundig Service 7.15

### **Grundig Anti-theft Systems for Car Radios**

| <u> </u>                        | 1                       | 1                       | i                       | 1                 | <u>†</u>                        | 1                       | i                       | 1                       | 1                 |
|---------------------------------|-------------------------|-------------------------|-------------------------|-------------------|---------------------------------|-------------------------|-------------------------|-------------------------|-------------------|
| Type of Car Radio<br>WKC/SCD/EC | Optional Code Number 1) | Specific Code Number 2) | Removable Control Panel | Quick-out Unit 3) | Type of Car Radio<br>WKC/SCD/EC | Optional Code Number 1) | Specific Code Number 2) | Removable Control Panel | Quick-out Unit 3) |
| 1590 VD                         |                         | •                       | <u> </u>                | •                 | 5600 RDS                        |                         | •                       | •                       |                   |
|                                 |                         | •                       | •                       |                   |                                 |                         | •                       | •                       |                   |
| 1630 VD                         |                         | •                       | •                       |                   | 5690 RDS                        |                         | •                       | •                       |                   |
| 1650 VD                         |                         | •                       | •                       |                   | 4000 RDS                        |                         | •                       | •                       |                   |
| 1670 VD                         |                         | •                       | _                       | •                 | 4290 RDS                        |                         | •                       | •                       |                   |
| 1703 RDS/RS                     |                         | •                       |                         | •                 | 4600 RDS                        |                         | •                       | •                       |                   |
| 1704 RDS/RS                     |                         | •                       |                         |                   | 3200 RDS                        |                         | •                       |                         |                   |
| 1705 RDS                        |                         | •                       | •                       |                   | 3201 RDS                        |                         | •                       | •                       |                   |
| 1903 RDS                        |                         | •                       | •                       |                   | 3300 RDS                        |                         | •                       | •                       |                   |
| 1904 RDS                        |                         | •                       | •                       |                   | 3301 RDS                        |                         |                         |                         |                   |
| 1905 RDS                        |                         | -                       | _                       |                   |                                 |                         |                         |                         |                   |
| 1910 RDS                        |                         | •                       | •                       |                   | _                               |                         |                         |                         |                   |
| 2632 VD                         |                         |                         |                         | •                 |                                 |                         |                         |                         |                   |
| 2642 VD                         |                         |                         |                         | •                 |                                 |                         |                         |                         |                   |
| 2670 VD                         |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 2680 VD                         |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 2803 VD/A                       |                         | •                       |                         | RS                |                                 |                         |                         |                         |                   |
| 2804 VD                         |                         | •                       |                         | RS                |                                 |                         |                         |                         |                   |
| 2805 VD                         |                         | •                       |                         | RS                |                                 |                         |                         |                         |                   |
| 2841 VD                         | •                       | from 845501             | •                       |                   |                                 |                         |                         |                         |                   |
| 2842 VD                         |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 2845 VD                         | •                       |                         |                         |                   |                                 |                         |                         |                         |                   |
| 3851 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 3860 VD/aVD                     | •                       | •                       |                         |                   |                                 |                         |                         |                         |                   |
| 3870 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 3880 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 3904 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 3905 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 4804 VD                         |                         | •                       | •                       | RS                |                                 |                         |                         |                         |                   |
| 4805 VD                         |                         | •                       | •                       | RS                |                                 |                         |                         |                         |                   |
| 4870 RDS/A/C                    |                         | •                       | •                       | 110               |                                 |                         |                         |                         |                   |
| 4871 RDS                        |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 5500 RDS/A/C                    |                         | •                       | •                       |                   |                                 |                         |                         |                         |                   |
| 6400 RDS                        |                         | •                       | •                       |                   | -                               |                         |                         |                         |                   |
| 6500 RDS                        |                         | •                       | •                       |                   | +                               |                         |                         |                         |                   |
| 7400 RDS                        |                         | •                       | •                       |                   | +                               |                         |                         |                         |                   |
| 7500 RDS                        |                         | •                       | •                       |                   | =                               |                         |                         |                         |                   |
|                                 |                         | •                       | •                       |                   | =                               |                         |                         |                         |                   |
| 5100 RDS                        |                         | •                       | •                       |                   | 1                               |                         |                         |                         |                   |
| 5101 RDS                        |                         | •                       | •                       |                   | 1) It is possible to enter an   | -                       | -                       |                         |                   |
| 5200 RDS                        |                         | •                       | •                       |                   | 2) The car radios are given     |                         | e number at the         | e factory               |                   |
| 5201 RDS                        |                         | •                       | •                       |                   | which cannot be changed         |                         |                         |                         |                   |
| 5290 RDS                        |                         | •                       | •                       |                   | 3) Quick-out plug-in unit. Y    |                         |                         |                         |                   |
| 5300 RDS                        |                         |                         |                         |                   | from the compartment by a       | a handle and ta         | ke it along with        | you.                    |                   |

Audio

5390 RDS

7.16 Grundig Service

RS plug-in unit, order no. G.IB.02-97

<sup>1)</sup> see chart opposite 2) Car radios with optional code number (anti-theft system1) 3) The coding screw has to be loosened before entering the code number 4) The figure on the left of the code number indicates the number of attempts counted.

Between the attempts 1-7 the waiting time increases to 24 hours. After the 7th attempt there is always a waiting period of 24 hours until a new code can be entered. Car radios with anti-theft system 1 allow a maximum of 8 attempts. After the 8th attempt the radio must be returned to the factory for decoding. 5) The coding is activated when "SAFE" flashes in the display with the car radio switched off.

|   | ,                             |  | ,                |
|---|-------------------------------|--|------------------|
| Anti-theft Coding of Car Radios  The following is a description of the coding and decoding methods for the different types of car radios. | 5200,<br>5300,<br>5690        | The following is a description of the coding and decoding methods for the different types of car radios. | 009              |
| of Car Radios The following is a description of the   | 1, 5;<br>0, 5;<br>0, 5;       | ar R   | 4000, 4290, 4600 |
| coding and decoding methods for the   | 5101, 3<br>5290, 3<br>5600, 3 | The following is a description of the coding and decoding methods for the                                | 429              |
| different types of car radios.  | 5100, (<br>5201, (<br>5390, ( | different types of car radios.   | 00               |
| Ţ.Ņ   | 51<br>52<br>53<br>53          | Ęž   | 40               |
| Activating the Coding   |                               | Activating the Coding  |                  |
| Radio is playing     Press button 1) for more than 1 second, select   | EXPERT                        | Radio is playing     Press button 1) for more than 1 second, select                                      | (EXPERT)         |
| "CODE" on the display with the rotary knob  |                               | "CODE" on the display with the right rotary  |                  |
| Press button 1) shortly - the display shows 1)  3. Enter the code number  | E                             | knob Press button 1) shortly - the display shows 1)  | CH               |
| The code is entered by repeatedly pressing  |                               | 3. Enter the code number by turning the right  | ]                |
| the station buttons 1-4 (station button 1 for   |                               | shaft encoder  4. Confirm the code number  |                  |
| figure 1, station button 2 for figure 2 a.s.o.)  A wrong code number can be corrected by  |                               | Press button 1) shortly  | Right shaft      |
| overwriting, i.e. by a new entry  |                               | "SAFE" appears in the display  | encoder          |
| 4. Confirm the code number Press button 1) shortly  | EXPERT                        | To leave the Expert Mode: Press button 1) for more than 1 second   | (EXPERT)         |
| "SAFE" appears in the display   |                               | 1 1033 Button 1) for more than 1 Second  | (EXPERT)         |
| To leave the Expert Mode:   | CADEDI                        |  |                  |
| Press button 1) for more than 1 second  | EXPERT                        |  |                  |
| Is the coding activated?  |                               | Is the coding activated?   |                  |
| Radio is playing     Press button 1) for more than 1 second   | EXPERT                        | Radio is playing     Press button 1) for more than 1 second  | (EXPERT)         |
| a. The coding is activated if   |                               | a. The coding is activated if  | 1 ( = /          |
| "SAFE" appears in the display b. The coding is not activated if   |                               | "SAFE" appears in the display<br>b. The coding is not activated if                                       |                  |
| "CODE" appears in the display   |                               | "CODE" appears in the display  |                  |
| To leave the Expert Mode:   | EV855                         | To leave the Expert Mode:  |                  |
| Press button 1) for more than 1 second  | EXPERT                        | Press button 1) for more than 1 second   | (EXPERT)         |
| Putting into operation again  |                               | Putting into operation again   |                  |
| On disconnection of the supply voltage the radio is electronically locked.  |                               | On disconnection of the supply voltage the radio is electronically locked.                               |                  |
| Reconnect the radio correctly to the supply   |                               | Reconnect the radio correctly to the supply  |                  |
| voltage.  |                               | voltage.   |                  |
| 2. Switch the radio on  "SAFE" appears in the display   |                               | Switch the radio on     "SAFE" appears in the display  |                  |
| After approx. 3 seconds the display shows 1)  | 1                             | After approx. 1 second the display shows 1)  | 1                |
| S. Enter the code number     Confirm the code number  |                               | S. Enter the code number with the shaft encoder     Confirm the code number                              |                  |
| Press button 1) shortly   | EXPERT                        | Press button 1) for approx. 1 second   | Right shaft      |
| "SAFE" appears in the display   |                               | "SAFE" appears in the display  | encoder          |
| After approx. 3 seconds - radio starts playing If the code number entered is not correct  |                               | After approx. 1 second - radio starts playing If the code number entered is not correct                  |                  |
| "SAFE" appears in the display   |                               | "SAFE" appears in the display  |                  |
| After a waiting time the counter 4) indicates   | 2                             | After a waiting time the counter 4) indicates  | 2                |
| Deactivating the coding   |                               | Deactivating the coding  |                  |
| Radio is playing     Press button 1) for more than 1 second, select   | EXPERT                        | Radio is playing     Press button 1) for more than 1 second, select                                      | (EXPERT)         |
| "SAFE" on the display with the rotary knob  | LAILINI                       | "SAFE" on the display with the rotary knob   | LAPERI)          |
| 3. Press button 1) shortly  | EXPERT                        | 3. Press button 1) shortly   | Right shaft enc. |
| The display shows 1) 4. Enter the code number   | E 1                           | The display shows 1) 4. Enter the code number with the shaft encoder                                     | CH 1             |
| 5. Confirm the code number  |                               | 5. Confirm the code number   |                  |
| Press button 1) shortly   | EXPERT                        | Press button 1) shortly  | Right shaft enc. |
| "CODE" appears in the display  If the code number entered is not correct  |                               | "CODE" appears in the display If the code number entered is not correct                                  |                  |
| "SAFE" appears in the display   |                               | "SAFE" appears in the display  |                  |
| After a waiting time the counter 4) indicates   | 2                             | After a waiting time the counter 4) indicates  | 2                |

<sup>1)</sup> see chart opposite 4) The figure on the left of the code number indicates the number of attempts counted. Between the attempts 1-7 the waiting time increases to 24 hours. After the 7th attempt there is always a waiting period of 24 hours until a new code can be entered.

6. Press button 1) for more than 1 second

(EXPERT)

**EXPERT** 

Audio

6. Press button 1) for more than 1 second

The following is a description of the coding and decoding methods for the

 Press button 1) until a signal is sounded. "EXPERT" appears shortly in the display. Press one of the buttons 1) until "CODE"

The indication 1) flashes in the display

appears in the display. Press button 1) shortly.

The code is entered by repeatedly pressing the station buttons 1-4 (station button 1 for

Press button 1) until a signal is sounded.

**Anti-theft Coding** 

different types of car radios

Activating the coding
1. Radio is playing

3. Enter the code number

of Car Radios

Type of Car Radio WKC/SCD/EC ...

3201, 3300

3200, 3301

**EXPERT** 

 $\odot$ 

**EXPERT** 

| figure 1, station button 2 for figure 2 a.s.o.) A wrong code number can be corrected by overwriting, i.e. by a new entry 4. Confirm the code number Press button 1) shortly  "SAFE" appears in the display To leave the Expert Mode: Press button 1) until a signal is sounded.  | EXPERT<br>EXPERT                  |
|--|-----------------------------------|
| Is the coding activated?  1. Radio is playing  2. Press button 1) for more than 1 second a. The coding is activated if "SAFE" appears in the display b. The coding is not activated if "CODE" appears in the display To leave the Expert Mode: Press button 1) for more than 1 second  | EXPERT                            |
| Putting into operation again On disconnection from the supply voltage the radio is electronically locked.  1. Reconnect the radio correctly to the supply voltage.  2. Switch the radio on     "SAFE" appears in the display     After approx. 3 seconds the display shows 1) 3. Enter the code number - see above 4. Confirm the code number     Press button 1) until display shows "SAFE"     After approx. 2 seconds - Radio starts playing The code number entered is not correct     "SAFE" appears in the display After a waiting period the counter 4) indicates | 1<br>EXPERT<br>2                  |
| Deactivating the coding  1. Radio is playing  2. Press button 1) until a signal is sounded.  "EXPERT" appears shortly in the display. Press one of the buttons 1) until "SAFE" appears in the display. Press button 1) shortly. The indication 1) appears in the display  3. Enter the code number - see above  4. Confirm the code number Press button 1) shortly The display shows 1) To leave the Expert Mode:  | EXPERT  EXPERT  1  EXPERT  "CODE" |

1) see chart opposite 4) The figure on the left of the code number indicates the number of attempts counted. Between the attempts 1-7 the waiting period increases to 24 hours. After the 7th attempt there is always a waiting period of 24 hours until a new code can be entered.

**EXPERT** 

Grundig Service 7.19

### **Anti-theft Coding of Car Radios**

The following is a description of the coding and decoding methods for the different types of car radios.

### Type of car radio: SCD 1590 VD

### Entering the code number (initial operation):

- 1. Switch the radio on.
  - The indication "CODE" appears on the display.
- 2. Press station button 1 quickly.
  - The display shows "000".
- 3. Enter the code number with the station buttons 1-4.
- 4. Confirm the code number with the right station search button >.

### Activating the coding:

- 1. Switch the radio off.
- 2. Press and hold the station buttons 1 and 4 simultaneously.
- 3. Switch the radio on.
  - The indication "Cod" appears after 2 seconds on the display.

### Deactivating the coding:

- 1. Switch the radio off.
- 2. Press and hold the station buttons 1 and 4 simultaneously.
- 3. Switch the radio on.
  - The indication "Cod" appears on the display
- 4. Enter the code number with the station buttons 1-4.
- 5. Confirm the code number with the right station search button >.

Please refer to the table for other coding procedures.

Audio

7.20 Grundig Service

## **Contents Electronic Appliances:**

| Summery of Products:                               |      |
|--|------|
| Men´s Shaver                                       | 8.2  |
| Hair Trimmer                                       |      |
| Beard Trimmer                                      | 8.5  |
| Lady Shaver/Epilation                              | 8.6  |
| Hair Dryers  | 8.7  |
| Electrical Tooth Brush                             | 8.7  |
| Accessories  | 8.8  |
| The most important Spare Parts for Grundig Shavers | 8.12 |



### Men's Shaver

| Model                             | Туре | Order No. | Product Description   |
|-----------------------------------|------|-----------|---|
| PRO avantgarde                    | 8875 | RPY 8875  | Battery and mains operation   |
| Colour: chrome, mat               |      |           | Modern design, ergonomic  |
|                                   |      |           | Metal shaving head frame  |
|                                   |      |           | Vibra-rotation system   |
|                                   |      |           | Rolling shutter, protection and on/off switch in one                        |
|                                   |      |           | Cutter blade with optimum cutting angle                                     |
|                                   |      |           | Battery charge indicator, LCD   |
|                                   |      |           | Platinum-plated shaver blade  |
|                                   |      |           | 2-stage combi-cut trimmer   |
|                                   |      |           | 12-24 Volt charging voltage for car and boat                                |
|                                   |      |           | Mains operation (100-240 Volt) is possible                                  |
|                                   |      |           | 60-MIN. QUICK CHARGE  |
| EAN No.                           |      |           | Deluxe case with mirror   |
| 400367242127 8                    |      |           | incl. wall bracket  |
| PRO Schumacher Coll.              | 8675 | RPY 8675  | Grundig Special Edition   |
| Colour: anthracite                | MS   | MS        | Battery and mains operation   |
|                                   |      |           | Modern design, ergonomic  |
|                                   |      |           | Metal shaving head frame  |
|                                   |      |           | Vibra-rotation system   |
|                                   |      |           | Rolling shutter, protection and on/off switch in one                        |
|                                   |      |           | Cutter blade with optimum cutting angle                                     |
|                                   |      |           | Battery charge indicator and recharge request, LED                          |
|                                   |      |           | Platinum-plated shaver blade  |
|                                   |      |           | 2-stage combi-cut trimmer   |
|                                   |      |           | 12-24 Volt charging voltage for car and boat                                |
|                                   |      |           | Mains operation (100-240 Volt) is possible                                  |
| EAN No.                           |      |           | 60-MIN. QUICK CHARGE  |
| 400367242129 2                    |      |           | Deluxe case with mirror   |
| PRO                               | 8675 | RPY 8675  | Battery and mains operation   |
| Colour: anthracite                | 0075 | KF 1 0075 | Modern design, ergonomic  |
| Colodi. antinacite                |      |           | Metal shaving head frame  |
|                                   |      |           | Vibra-rotation system   |
|                                   |      |           | Rolling shutter, protection and on/off switch in one                        |
|                                   |      |           | Cutter blade with optimum cutting angle                                     |
|                                   |      |           | Battery charge indicator and recharge request, LED                          |
|                                   |      |           | Platinum-plated shaver blade  |
|                                   |      |           | 2-stage combi-cut trimmer   |
|                                   |      |           | 12-24 Volt charging voltage for car and boat                                |
|                                   |      |           | Mains operation (100-240 Volt) is possible                                  |
| EAN No.                           |      |           | 60-MIN. QUICK CHARGE  |
|                                   |      |           | Deluxe case with mirror   |
| 400367242131 5                    | 8375 | RPY 8375  | Mains operation   |
| PRO avantgarde Colour: chrome mat | 0375 | 1 03/5    | Modern design, ergonomic  |
| Colour. Gironie mat               |      |           |   |
|                                   |      |           | Metal shaving head frame  |
|                                   |      |           | Vibra-rotation system  Rolling shutter, protection and on/off switch in one |
|                                   |      |           | Rolling shutter, protection and on/off switch in one                        |
|                                   |      |           | Cutter blade with optimum cutting angle                                     |
|                                   |      |           | Platinum-plated shaver blade  |
|                                   |      |           | 2-stage combi-cut trimmer   |
| E ANI NI o                        |      |           | Automatic voltage adapter   |
| EAN No.                           |      |           | (100-240 Volt)  |
| 400367242133 9                    |      |           | Deluxe case with mirror   |

Electronic Appliances

8.2 Grundig Service

| Model            | Type | Order No. | Product Description   |
|------------------|------|-----------|---|
| roltronic PRO    | 7645 | RPY 7645  | Battery and mains operation   |
| Colour: granite  |      |           | Glass-fibre reinforced shaving head frame                                       |
|                  |      |           | Two-way-cut system  |
|                  |      |           | Rolling shutter, protection and on/off switch in one                            |
|                  |      |           | Cutter blade with optimum cutting angle   |
|                  |      |           | Charge indicator and recharge request LED                                       |
|                  |      |           | Platinum-plated shaver blade  |
|                  |      |           | Super-wide hair trimmer   |
|                  |      |           | 12-24 Volt charging voltage for car and boat                                    |
|                  |      |           | Mains operation (100-240 Volt) is possible                                      |
| EAN No.          |      |           | 60-MIN. QUICK CHARGE  |
| 400367234912 1   |      |           | Handy case with mirror for travels  |
| roltronic PRO    | 7345 | RPY 7345  | •   |
| Colour: bornite  |      |           | Glass-fibre reinforced shaving head frame                                       |
|                  |      |           | Two-way-cut system  |
|                  |      |           | Rolling shutter, protection and on/off switch in one                            |
|                  |      |           | Cutter blade with optimum cutting angle   |
|                  |      |           | Platinum-plated shaver blade  |
|                  |      |           | Super-wide hair trimmer   |
| E ANI NI-        |      |           | Automatic voltage adapter   |
| EAN No.          |      |           | (100-240 Volt)  |
| 400367234911 4   |      |           | Handy case with mirror for travels  |
| double head plus | 6655 | RPY 6655  | Battery and mains operation   |
| Colour: black    |      |           | Double head   |
|                  |      |           | Glass-fibre reinforced shaving head frame                                       |
|                  |      |           | Counter-directional cutter blocks   |
|                  |      |           | "Green" power cell in line with the environment                                 |
|                  |      |           | LED battery charge and full-charge indicator                                    |
|                  |      |           | Visual and acoustic recharge request signal Platinum-plated shaving foil basket |
|                  |      |           | Far extending telescope long-hair trimmer                                       |
|                  |      |           | 12-24 Volt charging voltage for car and boat                                    |
|                  |      |           | Mains operation (100-240 Volt) is possible                                      |
| EAN No.          |      |           | 60-MIN. QUICK CHARGE  |
| 400367238242 5   |      |           | Elegant flat case with flap for cable   |
| double head plus | 6355 | RPY 6355  |   |
| Colour: black    |      |           | Double head   |
|                  |      |           | Glass-fibre reinforced shaving head frame                                       |
|                  |      |           | Counter-directional cutter blocks   |
|                  |      |           | Platinum-plated shaving foil basket   |
|                  |      |           | Far extending telescope long-hair trimmer                                       |
| EAN No.          |      |           | Automatic voltage adapter 100-240 Volt  |
| 400367238243 2   |      |           | Elegant flat case with flap for cable   |



| Model              | Туре | Order No. | Product Description  |
|--------------------|------|-----------|--|
| sportsline 6563    | 6563 | RPY 6563  | Battery and mains operation  |
| Colour: blue       |      |           | Double head  |
|                    |      |           | Glass-fibre reinforced shaving head frame  |
|                    |      |           | Shaving foil basket  |
|                    |      |           | Charge indicator (LED)   |
|                    |      |           | Battery full-charge indicator (on completion of the  |
|                    |      |           | charging process the signal lamp flashes)  |
|                    |      |           | 60 min. battery quick charge   |
| EAN No.            |      |           | Mains operation (100 – 240 Volt) is possible Far extending long-hair trimmer                         |
| 400367240850 7     |      |           | Elegant flat case with flap for cable  |
| sportsline 6363    | 6363 | RPY 6363  | Mains operation  |
| Colour: blue       | 0303 | KF 1 0303 | Double head  |
| Colour, blue       |      |           | Glass-fibre reinforced shaving head frame  |
|                    |      |           | Shaving foil basket  |
|                    |      |           | Switchable from 110/120 to 220/240 Volt  |
| EAN No.            |      |           | Far extending long-hair trimmer  |
| 400367240849 5     |      |           | Elegant flat case with flap for cable  |
| roltronic journey  |      |           | ,  |
| EAN 400367238248 7 | 6155 | RPY 6155  | Colour: bordeaux, bicolour design  |
| EAN 400367238247 0 | 6154 | RPY 6154  | , ,  |
| EAN 400367242076 9 | 6163 | RPY 6163  | •  |
|                    |      |           | Battery operation  |
|                    |      |           | Rolling shutter, protection and on/off switch in one   |
|                    |      |           | Shaving foil basket  |
|                    |      |           | Bicolour design  |
|                    |      |           | Superflat shape  |
|                    |      |           | Battery operation with 2 mignon cells or   |
|                    |      |           | 2 NiCd cells (not included in the delivery)  |
|                    |      |           | Integrated small cleaning brush  |
| single head        | 5563 | RPY 5563  | Battery and mains operation  |
| Colour: green      |      |           | Glass-fibre reinforced shaving head frame  |
|                    |      |           | Shaving foil basket  |
|                    |      |           | Charge indicator (LED)   |
|                    |      |           | Battery full-charge indicator (on completion of the charging process the charge signal lamp flashes) |
|                    |      |           | 60 min. battery quick charge   |
|                    |      |           | Mains operation (100 - 240Volt) is possible  |
| EAN No.            |      |           | Far extending long-hair trimmer  |
| 400367240848 4     |      |           | Elegant flat case with flap for cable  |
| single head        | 5363 | RPY 5363  | Mains operation  |
| Colour: green      |      |           | Glass-fibre reinforced shaving head frame  |
|                    |      |           | Shaving foil basket  |
|                    |      |           | Switchable from 110/120 to 220/240 Volt  |
| EAN No.            |      |           | Far extending long-hair trimmer  |
| 400367240847 7     |      |           | Elegant flat case with flap for cable  |

Electronic Appliances

8.4 Grundig Service

### **Hair Trimmers**

| Model          | Type | Order No. | Product Description                                     |
|----------------|------|-----------|---|
| hairstyle      | 4565 | RPY 4565  | Battery and mains operation - top class                 |
| Colour: black  |      |           | Charging station (and appliance holder in one)          |
|                |      |           | Solid detachable blade set                              |
|                |      |           | precision-ground for an extremely long lifetime         |
|                |      |           | "Green" power cell in line with the environment         |
|                |      |           | (approx. 50 min. operating time)                        |
|                |      |           | Automatic voltage adapter 100-240V                      |
|                |      |           | Attachable comb with 8 steps                            |
|                |      |           | Integrated cutting length adjustment, possible settings |
|                |      |           | 2, 4, 7, 10, 13, 16, 22mm                               |
| EAN No.        |      |           | Practical case  |
| 400367240846 0 |      |           | Small oil bottle, small cleaning brush                  |
| hairstyle      | 4365 | RPY 4365  | Mains operation - top class                             |
| Colour: black  |      |           | Solid detachable blade set                              |
|                |      |           | precision-ground for an extremely long lifetime         |
|                |      |           | Automatic voltage adapter 100-240V                      |
|                |      |           | Attachable comb with 8 steps                            |
|                |      |           | Integrated cutting length adjustment, possible settings |
|                |      |           | 2, 4, 7, 10, 13, 16, 22mm                               |
| EAN No.        |      |           | Practical case  |
| 400367240845 3 |      |           | Small oil bottle, small cleaning brush                  |

### **Beard Trimmers**

| Model                | Туре | Order No. | Product Description                             |   |
|----------------------|------|-----------|---|---|
| thema universal      | 4543 | RPY 4543  | Battery and mains operation                     |   |
| Colour: black        |      |           | "Green" power cell in line with the environment |   |
|                      |      |           | Detachable blade set                            |   |
|                      |      |           | Attachable long-hair trimmer                    |   |
|                      |      |           | Cutting length 2.5-15 mm                        |   |
|                      |      |           | Solid blade set                                 |   |
| EAN No.              |      |           | Charge signal lamp                              |   |
| 400367234914 5       |      |           | Travelling case                                 |   |
| thema battery        | 4143 | RPY 4143  | Battery operation                               |   |
| Colour: black        |      |           | Attachable long-hair trimmer                    |   |
|                      |      |           | Cutting length 2.5-15 mm                        |   |
|                      |      |           | Solid blade set                                 |   |
|                      |      |           | Battery operation with 3 mignon cells or        |   |
| EAN No.              |      |           | 3 NiCd cells (not included in the delivery)     |   |
| 400367234915 2       |      |           | Travelling case                                 |   |
| Beard trimmer, mains | 4363 | RPY 4363  | Mains operation                                 |   |
| Colour: black        |      |           | Solid and detachable blade set                  |   |
|                      |      |           | Detachable vario comb/5 settings                | A |
| EAN No.              |      |           | from 3 to 15 mm                                 |   |
| 400367240369 4       |      |           | Travelling case                                 |   |



### **Lady Shaver/Epilation**

| Model                 | Type | Order No. | Product Description                                  |
|-----------------------|------|-----------|--|
| lady care wet & dry   | 2465 | RPY 2465  | Battery operation                                    |
| Colour: mint          |      |           | For wet and dry shave                                |
|                       |      |           | Charging station/appliance holder                    |
|                       |      |           | Green power cell (NiMH) in line with the environment |
|                       |      |           | Multi-functional improved shaving system for:        |
|                       |      |           | - the arms   |
|                       |      |           | – the legs   |
|                       |      |           | - the armpit zone                                    |
| EAN No.               |      |           | – bikini line hairs                                  |
| 400367240626 8        |      |           | Elegant soft pouch and small cleaning brush          |
| lady care wet & dry   | 2165 | RPY 2165  | Battery operation                                    |
| Colour: turquois      |      |           | For wet and dry shave                                |
|                       |      |           | Operation with 2 mignon cells or                     |
|                       |      |           | with two NiCd cells (not included in the delivery)   |
|                       |      |           | Multi-functional improved shaving system for:        |
|                       |      |           | – the arms   |
|                       |      |           | – the legs   |
|                       |      |           | - the armpit zone                                    |
| EAN No.               |      |           | - and bikini line hairs                              |
| 400367240625 1        |      |           | Elegant soft pouch and small cleaning brush          |
| lady care epilation   | 2275 | RPY 2275  | Mains operation                                      |
| Colour: emerald-green |      |           | Attractive elegant design                            |
|                       |      |           | Two speeds   |
|                       |      |           | =-I. fine hairs                                      |
|                       |      |           | =-II. coarser hairs                                  |
|                       |      |           | Epilation method based on tweezers principle         |
|                       |      |           | Transformer 220 Volt -                               |
| EAN No.               |      |           | to low-voltage safety operation                      |
| 400367242101 8        |      |           | Practical case                                       |

## **Special Offers lady care**

| Model                  | Type | Order No. | Product Description                     |
|------------------------|------|-----------|---|
| lady care classic line |      |           |   |
| EAN 400367231900 1     | 2632 | RPY 1900  | Battery and mains operation             |
| EAN 400367231800 4     | 2614 | RPY 1800  | Switchable to 110V/220V mains supply    |
| EAN 400367232405 0     | 4270 | RPY 4270  | Battery operation                       |
|                        |      |           | Cosmetic look                           |
|                        |      |           | Multi-functional shaving system for:    |
|                        |      |           | - the armpit zone                       |
|                        |      |           | - short, fine hairs                     |
|                        |      |           | - the legs                              |
|                        |      |           | Small cleaning brush                    |
|                        |      |           | Type 2632 and 2614 with travelling case |

Electronic Appliances

8.6 Grundig Service

## **Hair Dryers**

| Model                       | Type | Order No. | Product Description                                   |
|-----------------------------|------|-----------|---|
| hairdress pro               | 3765 | RPY 3765  | 1500 W longlife motor                                 |
| professional 1500 hairdryer |      |           | 230 V, 50-60 Hz                                       |
|                             |      |           | Professional hairdressers results with profi features |
|                             |      |           | 3 heat settings (incl. real cold)                     |
|                             |      |           | 2 speed settings                                      |
|                             |      |           | Extremely narrow concentrator nozzle                  |
|                             |      |           | Extra long cable (3 metres)                           |
| EAN No.                     |      |           | Removable air filter                                  |
| 400367241581 9              |      |           | Hanging loop  |
| hairdress travel            | 3345 | RPY 3345  | 1000 W hand-held hair dryer with                      |
| Colour: black               |      |           | folding handle especially designed for travels        |
|                             |      |           | Switchable to 110-120/230-240 V, 50-60 Hz             |
|                             |      |           | 2 heat settings with indicator                        |
|                             |      |           | Air concentrator nozzle                               |
|                             |      |           | 2 adapters  |
| EAN No.                     |      |           | Bag/pouch   |
| 400367235117 9              |      |           | Hanging loop  |
| freestyle 6 in1             | 3455 | RPY 3455  | Hair styling set for many applications                |
| Colour: white/              |      |           | Six different attachments for styling                 |
| calypso-red                 |      |           | - zig-zags  |
|                             |      |           | - curls   |
|                             |      |           | - waves   |
|                             |      |           | - spirals   |
| EAN No.                     |      |           | - straightening                                       |
| 400367239410 7              |      |           | - crimps  |

### **Electrical Tooth Brush**

| Model               | Type  | Order No. | Product Description                                       |
|---------------------|-------|-----------|---|
| vario clean         | 1365  | RPY 1365  | Toothbrush, battery operation                             |
|                     |       |           | Optimum plaque removal                                    |
|                     |       |           | Works on oscillating round brush principle                |
|                     |       |           | Vario clean: 2 settings;                                  |
|                     |       |           | 70° Intensive (for healthy gums)                          |
|                     |       |           | 40° Gentle (for sensitive gums and                        |
|                     |       |           | for massaging the gums)                                   |
|                     |       |           | 4 attachable toothbrushes                                 |
|                     |       |           | Automatic voltage adjustment 100 - 240V                   |
|                     |       |           | 1 hour operating time when fully charged                  |
| EAN No.             |       |           | Metal-free anchored Multiluft brushes with optimum        |
| 400376241359 4      |       |           | brush rounding  |
| Replacement brushes | GS 13 | RPZ 1300  | Replacement brush for vario clean 1365 with extra         |
|                     |       |           | brush head, exchangeable                                  |
|                     |       |           | Doubled lifetime  |
|                     |       |           | Available in 4 different colours: mint, blue, pink, lilac |
|                     |       |           |   |



### **Accessories Men's Shaver**

| Shaver blades                           |   | Type  | Order No.  | Product Description  |
|---|---|-------|------------|--|
|   |   | GS 80 | RPS 8000   | Shaving foil basket platinum-plated for  |
| EAN No.                                 |   |       |            | roltronic PRO  |
| 400367232794                            | 5 |       |            | 8835, 8635, 8345, 8335, 7658, 7645, 7345                                       |
|   |   |       |            | PRO avantgarde 8875, 8675, 8375  |
|   |   | GS 63 | RPS 6300   | Shaving foil basket platinum-plated for  |
| EAN No.                                 |   |       |            | double head plus 6655, 6355,   |
| 400367238601                            | 0 |       |            | sportsline 6563, 6363  |
|   |   | GS 53 | RPS 5300   | Shaving foil basket for  |
| EAN No.                                 |   |       |            | single head 5563, 5363   |
| 400367240734                            | 0 |       |            |  |
|   |   | GS 21 | RPY 2400   | Shaving foil basket platinum-plated for  |
|   |   |       |            | Alpha 3; Beta 3; roltronic, all G 8255;  |
|   |   |       |            | roltronic Universal G 8264 - C/D/E/EK/G;                                       |
|   |   |       |            | G 8265/8267  |
| E ANI NIO                               |   |       |            | G 8242/G 8243  |
| EAN No. 400367226732                    | 6 |       |            | 6335/6536  |
| 400367226732                            | O | CS 20 | RPY 1700   | 6154/6155  |
|   |   | GS 20 | KP1 1700   | Shaving foil basket platinum-plated for Alpha 1/2; Beta 1/2; roltronic G 8254; |
| EAN No.                                 |   |       |            | roltronic Universal G 8264/A and B:  |
| 400367225263                            | 6 |       |            | Accent   |
| +00307223203                            |   | GS 16 | RPV 1300   | Shaver blade for Delta G 8262, G 8263  |
| EAN No.                                 |   |       | 141 7 1000 | onaver blade for bella e ozez, e ozeo  |
| 400367222930                            | 0 |       |            |  |
| .00001222000                            |   | GS 14 | RPV 1200   | Shaver blade for Gamma G 8240, G 8241  |
| EAN No.                                 |   |       | 1230       | 5.13.5. 5.13.5 for Samma 5 52 for 5 52 fr                                      |
| 400367222929                            | 4 |       |            |  |
| . , , , , , , , , , , , , , , , , , , , |   | GS 3  | RPV 1100   | Shaver blade for Alpha G 8225, G 8229 and                                      |
| EAN No.                                 |   |       |            | Beta G 8234, G 8235  |
| 400367222928                            | 7 |       |            | ,  |



8.8 Grundig Service

| Cutter blocks |    | Type  | Order No. | Product Description                       |
|---------------|----|-------|-----------|---|
|               |    | GS 81 | RPS 8100  | Precision-ground cutter for               |
| EAN No.       |    |       |           | roltronic PRO                             |
| 400367232795  | 2  |       |           | 8835, 8635, 8345, 8335, 7658, 7645, 7345  |
|               |    |       |           | PRO avantgarde 8875, 8675, 8375           |
|               |    | GS 64 | RPS 6400  | Cutter blocks for                         |
| EAN No.       |    |       |           | double head plus 6655, 6355               |
| 400367238602  | 7  |       |           |   |
|               |    | GS 68 | RPS 6800  | Double cutter block for                   |
| EAN No.       |    |       |           | sportsline 6563, 6363                     |
| 400367240736  | 4  |       |           |   |
|               |    | GS 54 | RPS 5400  | Cutter block for                          |
| EAN No.       |    |       |           | single head 5563, 5363                    |
| 400367240735  | 7  |       |           |   |
|               |    | GS 66 | RPS 6600  | Cutter block for 6154/6155                |
| EAN No.       |    |       |           | all roltronic models                      |
| 400367238674  | 4  |       |           | alpha 1/2/3, beta 1/2/3, Accent           |
|               |    | GS 9  | RPV 1600  | Cutter block for Delta G 8262, G 8263     |
| EAN No.       |    |       |           |   |
| 400367222933  | 1  |       |           |   |
| 100001222000  | •  | GS 8  | RPV 1500  | Cutter block for Gamma G 8240, G 8241     |
| EAN No.       |    |       |           | Salar block for Salitina S 52 10, S 52 11 |
| 400367222932  | 4  |       |           |   |
| 100001222002  | T. | GS 7  | RPV 1400  | Cutter block for Alpha G 8225, G 8229 and |
| EAN No.       |    | 007   | 1400      | Beta G 8234, G 8235                       |
|               | 7  |       |           | Dela G 0234, G 0233                       |
| 400367222931  | 1  |       |           |   |



| Other Accessori | es | Туре  | Order No.  | Product Description                               |
|-----------------|----|-------|------------|---|
|                 |    |       | RPZ 8400   | Wall bracket for PRO avantgarde                   |
| EAN No.         |    |       |            | Colour: black                                     |
| 400367242135    | 3  |       |            |   |
|                 |    | GS 61 | RPZ 6100   | Wall bracket for roltronic PRO                    |
| EAN No.         |    |       |            | Colour: black                                     |
| 400367234349    | 5  |       |            |   |
|                 |    | GS 67 | RPZ 6700   | Wall bracket for                                  |
|                 |    |       |            | double head plus 6655, 6355                       |
| EAN No.         |    |       |            | sportsline 6563, 6363                             |
| 400367239690    | 3  |       |            | single head 5563, 5363                            |
|                 |    | GS 60 | RPY 5800   | Wall bracket for all types of roltronic Universal |
|                 |    |       |            | battery/mains                                     |
| EAN No.         |    |       |            | Colour: black                                     |
| 400367231330    | 6  |       |            |   |
|                 |    | GS 58 | RPX 1300   | Wall bracket for all roltronic mains;             |
|                 |    |       |            | mains de Luxe                                     |
| EAN No.         |    |       |            | Colour: black                                     |
| 400367224728    | 1  | 00    | DDV 4000   |   |
|                 |    | GS 57 | RPX 1200   | Wall bracket for Alpha 2/3; Beta 2/3              |
| EAN No.         |    |       |            | Colour: grey                                      |
| 400367224727    | 4  | 00.50 | DDV 4400   | W III   |
|                 |    | GS 56 | RPX 1100   | Wall bracket for Alpha 1; Beta 1                  |
| EAN No.         | 7  |       |            | Colour: black                                     |
| 400367224726    | /  | CC 17 | DDV 4700   | Caulh and haddown annuading a sable for           |
|                 |    | GS 17 | KPV 1700   | Car/boat battery connecting cable for             |
| EAN No.         |    |       |            | 8835, 8635, 7645, 8264 E, 8264 E "K", 6536, 7658  |
| 400367222934    | Ω  |       |            | 6655, 6563, 5563                                  |
| +00301222334    | 0  | GS 62 | RPZ 6200   | Pre-shave stick                                   |
| EAN No.         |    | 0002  | 111 2 0200 | for a non-irritating close electric shave         |
| 400367238521    | 1  |       |            | 50 g compact powder stick                         |
| 700007200021    | '  | GS 65 | RPZ 6500   | Cleaning spray for cleaning and maintaining       |
| EAN No.         |    | 30 03 | 2 0000     | all shaving components                            |
| 400367238618    | 8  |       |            | 100 ml pump bottle biologically degradable        |
| 130001200010    |    | GS 83 | RPZ 8300   | Leather etui for all roltronic PRO models         |
| EAN No.         |    |       | 5555       | Localito, oldi loi dii loidoliio i ivo illodolio  |
| 400367241120    | 0  |       |            |   |
| 130001241120    |    | l     |            |   |



8.10 Grundig Service

### Accessories lady care

| Other Accessorie | s | Туре  | Order No. | Product Description                    |
|------------------|---|-------|-----------|--|
|                  |   | GS 26 | RPS 2600  | Foil basket for                        |
| EAN No.          |   |       |           | lady care wet & dry 2465               |
| 400367240844     | 6 |       |           |  |
|                  |   | GS 27 | RPS 2700  | Foil basket for                        |
| EAN No.          |   |       |           | lady care wet & dry 2165               |
| 400367240843     | 9 |       |           |  |
|                  |   | GS 25 | RPS 2500  | Cutter block for                       |
| EAN No.          |   |       |           | lady care wet & dry 2465, 2165         |
| 400367240842     | 2 |       |           |  |
|                  |   | GS 40 | RPY 2300  | Shaving system for Lady Care           |
| EAN No.          |   |       |           | G 2632, G 2614, G 4270                 |
| 400367226731     | 9 |       |           |  |
|                  |   | GS 44 | RPY 6400  | 2 rubber rings for long-hair cartridge |
| EAN No.          |   |       |           | Lady Care Battery Epilator G 8307      |
| 400367232112     | 7 |       |           |  |
|                  |   | GS 43 | RPY 6300  | Short-hair cartridge for               |
| EAN No.          |   |       |           | Lady Care Battery Epilator G 8307      |
| 400367232111 (   | 0 |       |           |  |
|                  |   | GS 42 | RPY 5300  | Short-hair cartridge for               |
| EAN No.          |   |       |           | Lady Care Electric Epilator G 8306     |
| 400367235300     | 5 |       |           |  |
|                  |   | GS 41 | RPY 5400  | 4 rubber rings for long-hair cartridge |
| EAN No.          |   |       |           | Lady Care Electric Epilator G 8306     |
| 400367235400     | 2 |       |           |  |



### The most important Spare Parts for GRUNDIG Shavers

| Shaver type         | 5363         | 5543         | 5563         | 6363         | 6563         |
|---------------------|--------------|--------------|--------------|--------------|--------------|
| Spare Part          | Order No.    |
| Protective cap      | 72081-019.20 | 72082-012.90 | 72081-019.20 | 72081-018.40 | 72081-018.90 |
| Shaving head frame  | 72081-019.30 | 72082-013.00 | 72081-019.30 | 72081-018.50 | 72081-018.50 |
| Motor               | 72086-007.80 | 72086-002.80 | 72086-008.80 | 72086-007.80 | 72086-008.20 |
| Electronics         | -            | 72086-003.10 | 72086-008.40 | -            | 72086-008.40 |
| Inside casing       | 72081-019.40 | -            | 72081-019.90 | 72081-018.60 | 72081-019.70 |
| Decorative parts    | 72081-019.50 | -            | 72081-020.00 | 72081-018.70 | 72081-019.80 |
| Motion transformer  | -            | 72083-005.40 | 72083-009.90 | -            | 72083-009.90 |
| Long-hair trimmer   | 72087-001.00 | 72084-003.70 | 72087-001.00 | 72087-001.00 | 72087-001.00 |
| Cutter block spring | 72084-003.90 | 72083-005.10 | 72084-003.90 | 72084-003.90 | 72084-003.90 |
| Sealing             | 72085-003.30 | 72082-005.40 | 72085-003.30 | 72085-003.30 | 72085-003.30 |
| On - Off slide      | 72081-018.80 | -            | 72081-018.80 | 72081-018.80 | 72081-018.80 |
| NiCd accumulator    | -            | 72086-001.10 | 72086-000.60 | -            | 72086-000.60 |

| Shaver type             | 8875         | 8675 MS      | 8675         | 8375         | 6563 MS        |
|-------------------------|--------------|--------------|--------------|--------------|----------------|
| Spare part              | Order No.      |
| Shaving head frame      | 72082-014.00 | 72082-014.00 | 72082-014.00 | 72082-014.00 | 72081-020.10   |
| Motor                   | 72086-009.10 | 72086-009.10 | 72086-009.10 | 72086-009.10 | 72086-008.20   |
| Electronics             | 72086-008.70 | 72086-008.80 | 72086-008.80 | 72086-009.00 | 72086-008.40   |
| Inside casing           | 72081-020.40 | 72081-020.50 | 72081-020.50 | 72081-020.60 | 72081-019.70*  |
| Rear part of the casing | 72081-020.70 | 72081-020.80 | 72081-030.40 | 72081-020.90 | 72081-030.00   |
| Decorative parts        | 72081-030.10 | 72081-030.20 | 72081-030.50 | 72081-030.30 | 72081-020.20   |
| Motion transformer      | 72083-010.00 | 72083-010.00 | 72083-010.00 | 72083-010.00 | 72083-010.00   |
| Long-hair trimmer       | 72084-004.00 | 72084-004.10 | 72084-004.40 | 72084-004.20 | 72084-004.30   |
| Cutter block spring     | -            | -            | -            | -            | 72084-003.90   |
| Sealing                 | 72085-002.90 | 72085-002.90 | 72085-002.90 | 72085-002.90 | 72085-003.30   |
| Accumulator cpl.        | 72086-012.80 | 72086-012.80 | 72086-012.80 | -            | 72086-001.10** |
|                         |              |              |              | *casing cpl. | **NiCd accu    |
|                         |              |              |              |              |                |
| Hear and Beard          |              |              |              | _            |                |

| Hear and Beard<br>Trimmer<br>Shaver Type | 4143         | 4345/55      | 4363         | 4543         | 4547         |
|--|--------------|--------------|--------------|--------------|--------------|
| Spare Part                               | Order No.    |
| Vario comb                               | 72081-010.10 | 72083-007.90 | 72083-009.80 | 72081-010.10 | 72083-007.90 |
| Comb no.: 1                              | -            | -            | -            | -            | 72086-007.20 |
| Comb no.: 3                              | -            | -            | -            | -            | 72083-007.80 |
| Comb 6-9 mm                              | -            | -            | -            | -            | -            |
| Comb 12-15 mm                            | -            | -            |              | -            | -            |
| Comb                                     | -            | 72083-007.20 | -            | -            | -            |
| Blade set                                | 72087-000.70 | 72087-000.60 | 72087-000.90 | 72087-000.50 | -            |
| Electronics                              | -            | -            | 72086-007.50 | 72086-006.00 | 72086-006.40 |
| Motor                                    | 72086-012.20 | -            | 72086-007.40 | 72086-005.50 | 72086006.30  |
| Oscillating armature                     | -            | 72086-005.80 |              | -            | -            |
| Magnet coil                              | -            | 72086-005.60 |              | -            | -            |



| Hair Trimmer Type | 4365         | 4565         |
|-------------------|--------------|--------------|
| Spare Part        | Order No.    | Order No.    |
| Body              | 72088-000.10 | 72088-000.20 |
| Blade set         | 72087-001.10 | 72087-001.10 |
| Charging station  | -            | 72089-016.30 |

8.12 Grundig Service

### The most important Spare Parts for GRUNDIG Shavers

| Shaver Type              | 5334         | 5335         | 5543         | 6355          | 6655          | 7345         |
|--------------------------|--------------|--------------|--------------|---------------|---------------|--------------|
| Spare Part               | Order No.    | Order No.    | Order No.    | Order No.     | Order No.     | Order No.    |
| Ejector plate, left      | -            | -            | -            | -             | -             | -            |
| Ejector plate, right     | -            | -            | -            | -             | -             | -            |
| Protective cap           | 72082-005.60 | 72082-005.20 | 72082-012.90 | 72081-016.90  | 72081-016.90  | -            |
| Shaving head frame       | 72082-007.70 | 72082-005.30 | 72082-013.00 | 72082-012.60  | 72082-012.60  | 72082-011.70 |
| Motor                    | 72086-003.90 | 72086-003.90 | 72086-002.80 | 72086-006.90  | 72086-007.10  | 72086-004.40 |
| Electronics              | 72086-005.10 | 72086-005.10 | 72086-003.10 | 72086-007.00  | 72086-007.20  | 72086-004.70 |
| Front part of the casing | 72081-013.30 | 72081-013.20 | 72081-017.50 | 72081-017.00* | 72081-001.90* | 72081-013.70 |
| Rear part of the casing  | 72081-004.30 | 72081-007.70 | 72081-017.60 | -             | -             | 72081-014.10 |
| Ejector spring           | -            | -            | -            | -             | -             | -            |
| Rolling shutter          | -            | -            | -            | -             | -             | 72082-012.00 |
| Tubular holder           | -            | -            | -            | -             | -             | -            |
| Cutter block spring      | 72083-005.10 | 72083-005.10 | -            | -             | -             | -            |
| Motion transformer       | 72083-005.40 | 72083-005.40 | 72083-005.40 | 72082-012.70  | 72082-012.70  | 72083-014.60 |
| Long-hair trimmer        | 72084-002.90 | 72084-001.90 | 72084-003.70 | 72084-003.60  | 72084-003.60  | 72084-003.10 |

| Shaver Type              | 7645         | 7658         | 8335         | 8345         | 8635         | 8835         |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Spare Part               | Order No.    |
| Ejector plate, left      | -            | -            | -            | -            | -            | -            |
| Ejector plate, right     | -            | -            | -            | -            | -            | -            |
| Protective cap           | -            | -            | -            | -            | -            | -            |
| Shaving head frame       | 72082-011.90 | 72082-011.20 | 72082-011.20 | 72082-011.20 | 72082-011.20 | 72083-014.50 |
| Motor                    | 72086-004.40 | 72086-004.40 | 72086-004.40 | 72086-004.40 | 72086-004.40 | 72086-004.40 |
| Electronics              | 72086-004.80 | 72086-004.70 | 72086-004.70 | 72086-004.70 | 72086-004.80 | 72086-004.30 |
| Front part of the casing | 72081-013.90 | 72081-013.90 | 72081-012.10 | 72081-001.90 | 72081-012.20 | 72081-011.90 |
| Rear part of the casing  | 72081-014.10 | 72081-014.10 | 72081-012.40 | 72081-012.40 | 72081-012.90 | 72081-011.20 |
| Ejector spring           | -            | 72083-014.80 | 72083-014.80 | 72083-014.80 | 72083-014.80 | 72083-014.80 |
| Rolling shutter          | 72082-012.00 | 72082-012.00 | 72082-011.00 | 72082-011.00 | 72082-011.00 | 72082-010.90 |
| Tubular holder           | -            | -            | -            | -            | -            | -            |
| Cutter block spring      | -            | -            | -            | -            | -            | -            |
| Motion transformer       | 72083-014.60 | 72083-014.60 | 72083-014.60 | 72083-014.60 | 72083-014.60 | 72083-014.60 |
| Long-hair trimmer        | 72084-003.00 | 72084-003.00 | 72084-002.70 | 72084-002.70 | 72084-002.70 | 72084-002.60 |

<sup>\*</sup> casing complete

#### **Exchange products:**

All hairdress products freestyle 6 in 1 roltronic journey 6154/6155 All lady care products

Exception: lady care 2632



# Calendar 1998

| January         | February            | March                       | April                     | May                    | June                  |
|-----------------|---------------------|-----------------------------|---------------------------|------------------------|-----------------------|
| 1 Th New Year 1 | 1 So                | 1 So                        | 1 We 14                   | 1 Fr 1st May           | 1 Mo Whit Monday      |
| 2 Fr            | 2 Mo                | 2 Mo Expert                 | 2 Th                      | 2 Sa                   | 2 Tu                  |
| 3 Sa            | 3 Tu                | 3 Tu Expert                 | 3 Fr Telering             | 3 So                   | 3 We                  |
| 4 So            | 4 We 6              | 4 We 10                     | 4 Sa Telering             | 4 Mo                   | 4 Th 23               |
| 5 Mo            | 5 Th                | 5 Th Ruefach                | 5 So Telering             | 5 Tu                   | 5 Fr                  |
| 6 Tu            | 6 Fr                | 6 Fr Ruefach                | 6 Mo                      | 6 We                   | 6 Sa                  |
| 7 We 2          | <b>7</b> Sa         | 7 Sa Ruefach                | 7 Tu                      | 7 Th 19                | 7 So                  |
| 8 Th            | 8 So                | 8 So                        | 8 We 15                   | 8 Fr                   | 8 Mo                  |
| 9 Fr            | 9 мо                | 9 мо                        | 9 Th                      | 9 Sa                   | 9 Tu                  |
| 10 Sa           | 10 Tu               | 10 Tu                       | 10 Fr Good Friday         | 10 So                  | 10 We                 |
| 11 So           | 11 We 7             | 11 We Int. Messe Kairo 11   | 11 Sa                     | 11 Mo                  | 11 Th                 |
| 12 Mo           | 12 Th               | 12 Th Int. Messe Kairo      | 12 So Easter Sunday       | 12 Tu Interhospital    | 12 Fr                 |
| 13 Tu           | 13 Fr               | 13 Fr Internorga/Int.Kairo  | 13 Mo Easter Monday       | 13 We Interhospital    | 13 Sa                 |
| 14 We 3         | 14 Sa Intergastra   | 14 Sa Internorga/Int.Kairo  | 14 Tu                     | 14 Th Interhospital 20 | 14 So                 |
| 15 Th           | 15 So Intergastra   | 15 So Internorga/Int.Kairo  | 15 We 16                  | 15 Fr Interhospital    | 15 Mo                 |
| 16 Fr           | 16 Mo Intergastra   | 16 Mo Internorga/Int.Kairo  | 16 Th                     | 16 Sa                  | 16 Tu                 |
| 17 Sa           | 17 Tu Intergastra   | 17 Tu Internorga/Int.Kairo  | 17 Fr                     | 17 So                  | 17 We                 |
| 18 So           | 18 We Intergastra 8 | 18 We Internorga/Int.Kai 12 | 18 Sa AMI                 | 18 Mo                  | 18 Th 25              |
| 19 Мо           | 19 Th Intergastra   | 19 Th CeBIT/Int.Kairo       | 19 So AMI                 | 19 Tu                  | 19 Fr                 |
| 20 Tu           | 20 Fr               | 20 Fr CeBIT/Int.Kairo       | 20 Mo <b>AMI</b>          | 20 We                  | 20 Sa                 |
| 21 We 4         | 21 Sa               | 21 Sa CeBIT                 | 21 Tu <b>AMI</b>          | 21 Th 21               | 21 So                 |
| 22 Th           | 22 So               | 22 So CeBIT                 | 22 We AMI 17              | 22 Fr                  | 22 Mo                 |
| 23 Fr           | 23 Mo               | 23 Mo CeBIT                 | 23 Th AMI                 | 23 Sa                  | 23 Tu                 |
| 24 Sa           | 24 Tu               | 24 Tu CeBIT                 | 24 Fr AMI/Der neue Planet | 24 So                  | 24 We ELTEC           |
| 25 So           | 25 We 9             | 25 We <b>CeBIT</b> 13       | 25 Sa AMI/Der neue Planet | 25 Mo                  | 25 Th <b>ELTEC</b> 26 |
| 26 Mo           | 26 Th               | 26 Th Interfunk             | 26 So AMI                 | 26 Tu                  | 26 Fr ELTEC           |
| 27 Tu           | 27 Fr               | 27 Fr Interfunk             | 27 Mo                     | 27 We                  | 27 Sa                 |
| 28 We 5         | 28 Sa               | 28 Sa Interfunk             | 28 Tu                     | 28 Th 22               | 28 So                 |
| 29 Th           |                     | 29 So Interfunk             | 29 We                     | 29 Fr                  | 29 Мо                 |
| 30 Fr           |                     | 30 Mo Interfunk             | 30 Th 18                  | 30 Sa                  | 30 Tu                 |
| <b>31</b> Sa    |                     | 31 Tu                       |                           | 31 So Whit Sunday      |                       |

| July        | August              | September                  | October                  | November               | December           |
|-------------|---------------------|----------------------------|--------------------------|------------------------|--------------------|
| 1 We        | 27 1 Sa             | 1 Tu                       | 1 Th efa                 | 1 So Consumenta        | 1 Tu               |
| 2 Th        | 2 So                | 2 We Elektrotechnik 36     | 2 Fr efa                 | 2 Mo                   | 2 We 49            |
| 3 Fr        | 3 Mo                | 3 Th Elektrotechnik        | 3 Sa                     | 3 Tu                   | 3 Th               |
| 4 Sa        | 4 Tu                | 4 Fr Elektrotechnik        | 4 So                     | 4 We 45                | 4 Fr               |
| 5 So        | 5 We                | 5 Sa Elektrotechnik/IAA N. | 5 Mo                     | 5 Th                   | 5 Sa               |
| 6 Mo        | 6 Th                | 6 So IAA Nutzfahrzeuge     | 6 Tu                     | 6 Fr                   | 6 So               |
| <b>7</b> Tu | 7 Fr                | 7 Mo IAA Nutzfahrzeuge     | 7 We 41                  | 7 Sa                   | 7 Mo               |
| 8 We        | 28 8 Sa             | 8 Tu IAA Nutzfahrzeuge     | 8 Th                     | 8 So DIMA              | 8 Tu               |
| 9 Th        | 9 So                | 9 We IAA Nutzfahrzeug 37   | 9 Fr                     | 9 Mo <b>DIMA</b>       | 9 We 50            |
| 10 Fr       | 10 Mo               | 10 Th IAA Nutzfahrzeuge    | 10 Sa                    | 10 Tu DIMA/Electronica | 10 Th              |
| 11 Sa       | 11 Tu               | 11 Fr IAA Nutzfahrzeuge    | 11 So                    | 11 We Electronica 46   | 11 Fr              |
| 12 So       | 12 We               | 33 12 Sa IAA Nutzfahrzeuge | 12 Mo                    | 12 Th Electronica      | 12 Sa              |
| 13 Mo       | 13 Th               | 13 So IAA Nutzfahrzeuge    | 13 Tu                    | 13 Fr Electronica      | 13 So              |
| 14 Tu       | 14 Fr               | 14 Mo                      | 14 We 42                 | 14 Sa                  | 14 Mo              |
| 15 We       | 29 15 Sa            | 15 Tu Automechanika        | 15 Th                    | 15 So                  | 15 Tu              |
| 16 Th       | 16 So               | 16 We Autom./Photokina 38  | 16 Fr                    | 16 Mo                  | 16 We 51           |
| 17 Fr       | 17 Mo               | 17 Th Autom./Photokina     | 17 Sa                    | 17 Tu                  | 17 Th              |
| 18 Sa       | 18 Tu               | 18 Fr Autom./Photokina     | 18 So                    | 18 We 47               | 18 Fr              |
| 19 So       | 19 We               | 34 19 Sa Autom./Photokina  | 19 Mo Systems            | 19 Th                  | 19 Sa              |
| 20 Mo       | 20 Th               | 20 So Autom./Photokina     | 20 Tu Systems            | 20 Fr                  | 20 So              |
| 21 Tu       | 21 Fr               | 21 Mo Photokina            | 21 We Systems 43         | 21 Sa                  | 21 Mo              |
| 22 We       | 30 22 Sa            | 22 Tu                      | 22 Th Orgatec/Systems    | 22 So                  | 22 Tu              |
| 23 Th       | 23 So               | 23 We 39                   | 23 Fr Orgatec/Systems    | 23 Mo                  | 23 We 52           |
| 24 Fr       | 24 Mo               | 24 Th                      | 24 Sa Orgatec/Consumenta | 24 Tu                  | 24 Th Christmas    |
| 25 Sa       | 25 Tu               | 25 Fr                      | 25 So Orgatec/Consumenta | 25 We 48               | 25 Fr Christmas    |
| 26 So       | 26 We CeBIT Home    | 35 26 Sa                   | 26 Mo Orgatec/Consumenta | 26 Th                  | 26 Sa Christmas    |
| 27 Mo       | 27 Th CeBIT Home    | 27 So                      | 27 Tu Orgatec/Consumenta | 27 Fr                  | 27 So              |
| 28 Tu       | 28 Fr CeBIT Home    | 28 Mo                      | 28 We Consumenta 44      | 28 Sa                  | 28 Mo              |
| 29 We       | 31 29 Sa CeBIT Home | 29 Tu                      | 29 Th Consumenta         | 29 So                  | 29 Tu              |
| 30 Th       | 30 So CeBIT Home    | 30 We efa 40               | 30 Fr Consumenta         | 30 Mo                  | 30 We 53           |
| 31 Fr       | 31 Mo               |                            | 31 Sa Consumenta         |                        | 31 Th New Year Eve |

